

The CAVALRY JOURNAL

Devoted to the Interests of the Cavalry,
to the Professional Improvement of Its
Officers and Men, and to the Advance-
ment of the Mounted Service Generally

EDITOR

Major K. S. BRADFORD, Cavalry

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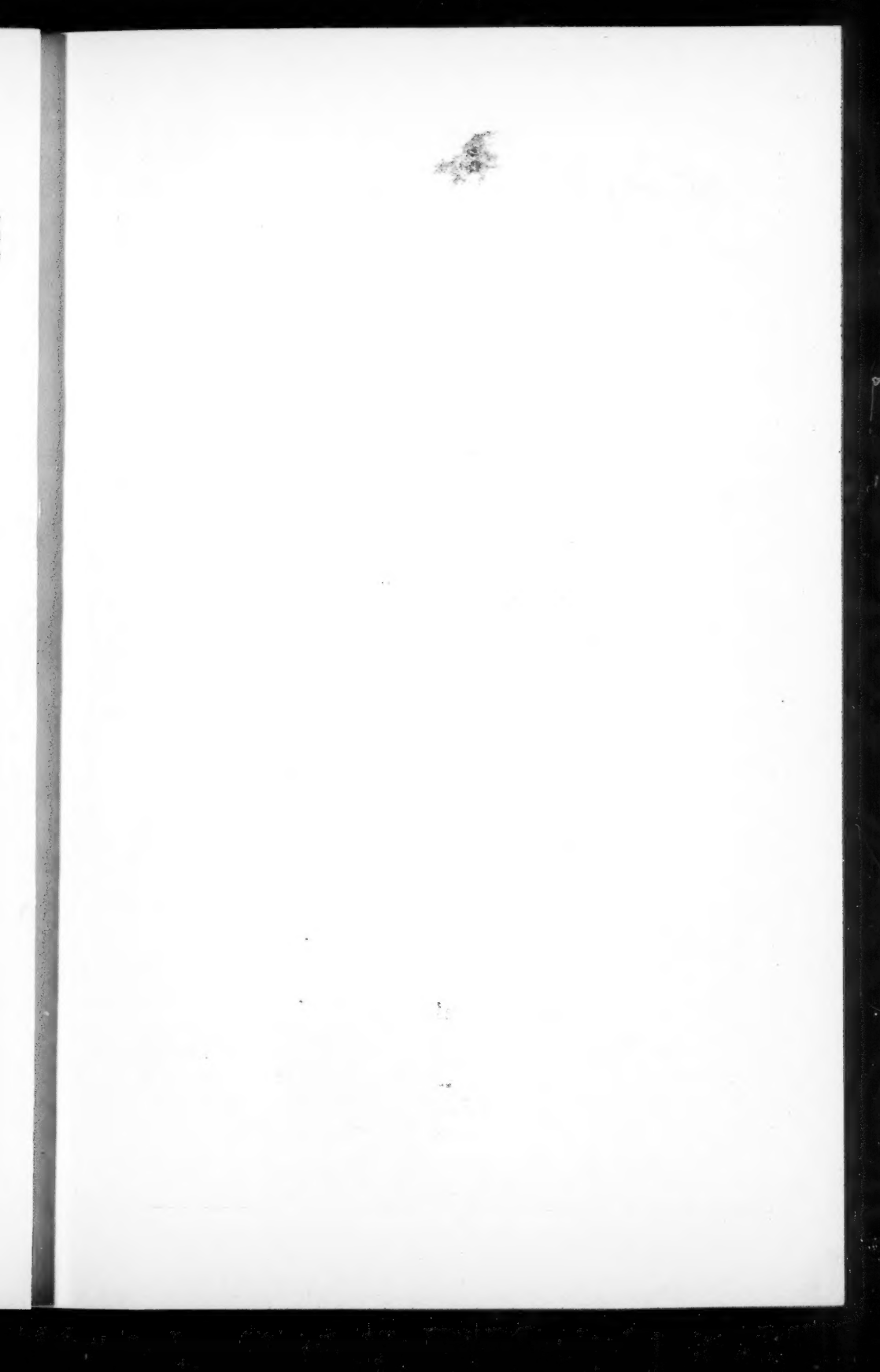
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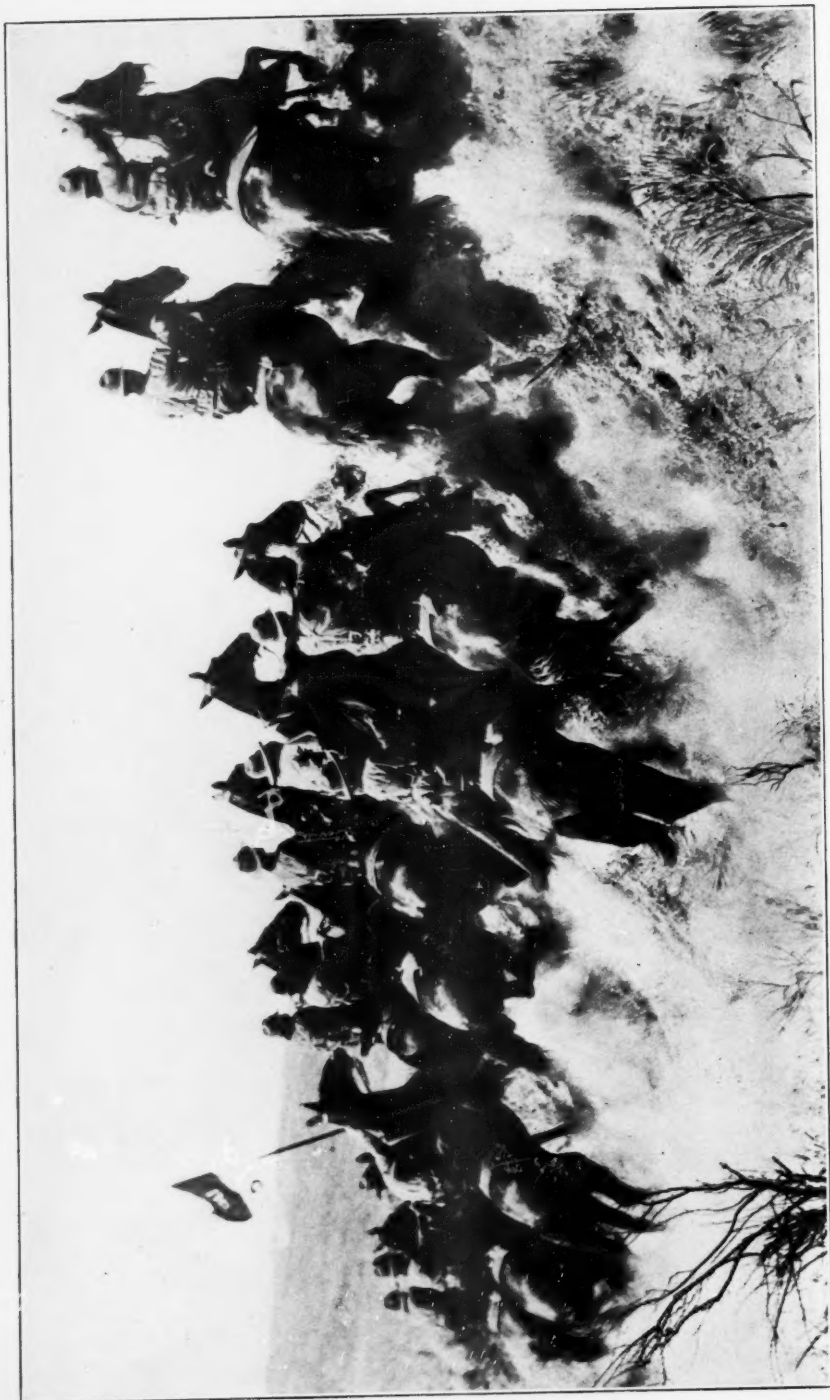
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Wide World Photo

On Maneuvers
Troop C, 116th Cavalry, Idaho National Guard

The CAVALRY JOURNAL

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JANUARY, 1928

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The Calv'ry Gunners

By FIRST LIEUT. LEONARD H. NASON, 158th M. G. Squadron
Author of Chevrons, Three Lights from a Match, and Other Stories

THE afternoon was growing rapidly along to twilight and night. It had been a hot day and the night gave prospects of being hotter. A division of the American Expeditionary Forces, vigorous in their youth and filled with an overwhelming desire to close with the enemy, had at last found its wish fulfilled. It had entered into battle and was getting its belly full of fight and its skin full of holes. The enemy was likewise eager. He could see the end of the war in sight and at every crossroads a sign post assured him that Paris was only eighty kilometers away. Paris and Peace. And anything that got in the way, such as the division in question, had better look to itself.

A rock filled, bumpy, farm road ran from the heights above the Marne back into the country, joining the highway to Condé en Brie, and later the main road to Paris. A party of horsemen appeared at the far end of this road, and riding at a rapid trot, clattered up the slight slope. They were out of sight of enemy here, due to the thick woods, but machine gun fire was clearly audible, and an occasional shrapnel cracked overhead. The horsemen were probably members of some staff, up looking around to see how the line was holding. They skirted the edge of a grove and suddenly one of them drew rein. He was a French officer, a high ranker from the stars on his sleeve. He beckoned to him an American officer, evidently an interpreter, for this one, having listened attentively, rode into the grove while the horsemen waited for him outside. There were horses in that grove, some thirty of them, the limbers of a battery of field artillery that was just a little way off, doing what it could to increase the German casualty list.

"Who's in command here?" demanded the officer who had ridden into the grove. Silence. The horses stamped and their harnesses rattled. The sun slanted through the treetops, and gave promise of an early twilight. The officer rose in his stirrups and looked about. There were no men with the horses. "Who's in command?" repeated the officer. He added words forbidden by the regulations to be addressed to man or beast. "Who tied these horses to trees?" There was no answer. The officer listened. Considerable racket came up to his ears from the valley below. A lively ring-around-the-

rosey was going on there, and the officer had seen some of it through his field glasses. The night was going to be dark, and he was far from home.

"It's against the regulations to tie horses to trees," he shouted. "Untie them immediately! They eat the bark and the French authorities don't like it! You hear me?" Silence gave assent, or so the officer considered. He rejoined the staff, and they all clattered away.

When the staff had disappeared and the sound of their hoofs was no longer audible, a bush moved to one side and a man appeared.

"S all right," called this man, "come out. They gone away."

More than a dozen men appeared, from behind trees, out of holes, from under bushes. These men were all old. They were bronzed by years of exposure to the Border sun, their legs were bowed from long wrapping about a horse's belly, with a sabre under one and a gun boot under the other. They did not wear the burlap uniform of the new army, but each one had breeches with balloon-like peg, made from the cloth of the 1907 model overcoat, and with the seams stitched with yellow silk. They wore laced leggins faced with leather. It was astonishing to see these men in such surroundings. They were cavalymen of the breed that was trained by the old type of cavalry officer, that had his training by the moustached Christers of the old plains cavalry, men that washed with saddle soap and that anointed their loins with neats-foot oil, that slept in their spurs three hundred and sixty days in the year, that had no home but a foot-locker, no love but for their "hawss" and no fear save only of the Old Man.

The eldest, most bowlegged of these men that had appeared out of the forest like the dwarfs to Rip van Winkle, unrolled a blanket with a sweep of his hand and with the other brought out a pack of cards from his breast pocket.

"It's my deal," said he. "This'll be seven-toed Pete, an' the one-eyed Jacks is wild."

"That shavey ain't liable to come curvin' back here, is he?" asked one of the others, squatting down and taking a peek at the first card dealt him.

"Naw," said the dealer. "He come in an' done his duty an' gone. If I'd known what he was upset about I'd a stayed. I thought he was after us to dig a trench or somethin'."

"We done right to migrate," observed another. "He'd a had us untie them jar-heads an' stand here holdin' 'em until night or tomorrow morning or whenever. Who's bettin'?"

The game continued in peace. Once in awhile one of the men would listen a second to the fighting below them, but no one made any remark. There were no other men in the grove save these cavalymen. What were they doing with a regiment of artillery? Ah, it was not a regiment of artillery, but one of cavalry, but they were armed with 75's instead of sabres.

A long time ago, at the beginning of the war, it had been judged wise to

change two regiments of cavalry to field artillery.* The regiment to which these men belonged had been changed. Officers, non-coms, and stable orderlies were, by the signing of an order, changed from one branch of the service to the other, to their intense disgust. These men that were grouped about the blanket were the non-commissioned officers of a troop. They had turned in their sabres and rifles, they had learned to signal "caissons right about," they had drilled with wagon bodies when they had no guns, they had learned to say such words as "parallax" and "barometric co-efficient" without breaking their jaws, they had strained their eyes through the peep-holes of panoramic sights, could repeat, parrot-like, that at the command "prepare for action," number one let down the apron and that number four handed out tow or waste to the gunners. This took months of head-aching effort. Then the regiment came to France and all that they had learned must be unlearned again. The gun was no longer a "three inch," but a "seventy-five." They did not have a panoramic sight, but a little thing with a white cross on it, over which one peeked at a stick. The caisson did not have an apron that let down, but it tipped up bodily. The first day's explanations, given in broken English by a French non-com who employed and required to be repeated such words as "gisement," "ligne de reparage," "pointe de cheminement," and "obus percutant," was enough for the non-commissioned officers. They went forth, headed by one Joe Gunnison, ranking sergeant, and filled themselves with strange liquors. They then fought to their hearts content with the members of the Military Police, came back to camp and rolled the offending guns right through a portable barracks, and went to bed. When they awoke they were privates. That they might still have a horse to fork, a saddle to use as a pillow, and a horse blanket to keep them warm, they were made drivers. So they found themselves in the grove watching the limbers, while new fresh-faced Johns, of a year's service, commanded the gun crews and fought the battery on the slope below them.

The battery, under the aforesaid Johns, was doing well. There came suddenly one of those changes that, when they occur at sea, are marked by a sudden darkening of the sky, a freshening of the wind, and drumming, and the arriving of spray on the vessel's deck. Look out for stormy weather. In battle a change is marked by a sudden outbreak of prolonged firing, men can distinguish individual reports of rifles, they hear yelling, and bullets begin to find lodgements in the immediate vicinity. The battery began to experience this. The infantry in front of them had been ordered to retire, at the approach of night, to a line of resistance marked by an aqueduct. This aqueduct was long and the direction of the retirement not specified. One battalion went one way and another, another. German contact patrols suddenly appeared in an orchard a hundred yards or so from the guns. The guns were in abbatage, that is, their wheels were locked on the brakes, and their trail spades were

*Actually seven regiments of cavalry were converted to field artillery and sent to France, but only two saw service at the front. Four unconverted cavalry regiments also went to France, while the remainder fought the war on the Mexican border and in training camps.—*Editor's note.*

jammed deep in the ground against a log of wood. While the gun crews sought madly to get these trails out of the hole, and the guns out of abbatage so that they could be swung for direct fire on this new target, the enemy brought up some light machine guns and a considerable force of infantry. The executive officer was killed, the battery commander was killed, two section chiefs and half the gun crews went down in heaps, and the survivors retired hurriedly. They went directly toward the limbers and the card game was once more suspended.

"What's the army all kettled about?" demanded ex-sergeant Gunnison with disgust. "An' just as I was havin' a little luck. Where yuh goin', Jaspero, hear pay-day blown?"

"The boche took our guns!" panted the men. "The place is lousy with 'em! You better be gettin' outta here!"

"Hook up these limbers!" ordered one of the surviving officers, "and go down and get those guns away."

"Too late!" objected the orientation officer, who was the last away, "they're on the guns now. You can see 'em." He led the other to a space where he could see through the trees a number of grey-clad figures already swarming about the guns, occupied in removing the shoes from the dead gunners.

"The infantry have let 'em through," agreed the first officer. It was getting dark in those woods and the men had upon them the chill that comes with the sight of their first battle-dead, and a contact with a remorseless enemy. "Let's get to hell out of here. Mount up those limbers and let's go! We can't hold 'em off with pistols! If we only had a gun up here we could keep them off the rest until we got some help!"

"They'd chew hell out of anything that went down there now!" said the other officer sadly.

"Could the lieutenant use one o' them guns?" asked Joe Gunnison. "If so, we can make out to get one!"

"Don't be crazy! How could you get a gun?"

"Few calv'ry tactics, sir!"

"Well, go to it!"

"Mount up, you hombres!" barked Gunnison. Who we got for calvrymen here? Unhitch them teams! Turn loose them limbers all but one! All got pistols? Man, if we only carried sabres like the frog artillyurry we'd show yuh some scimmagin'! Calvrymen, follow me! This aint wagon soldierin' no more! Ready with them hawsses? First an' second piece team take the right, limber in the middle, fourth piece to the left! As forigers at five yards! Raise pistol! Let's go! Don't let a spik-boche, I mean son escape!"

They rolled down the slope at a dead run, the teams still coupled, but lead, swing, and wheel running side by side instead of in column, and ridden by old-time "calv'rymen" that r'ared to go. They tore out into the open—only old-timers could have brought those coupled horses through the woods without wrapping them around trees—and swept up to the guns with a crackle of pistol fire. The Germans, taken unaware, and only seeing a sudden wave of horsemen

surge at them in the half light, could not tell that they were only attacked by a dozen men. All they saw were huge horses, rearing and plunging, all they heard was a wild yell and the thunder of hoofs and the crack-crack of pistols.

The German machine guns opened fire from the opposite slope, but a machine gun throws its bullets where it listeth and not always where the gunner intends. The cavalymen were unscathed. Gunnison and the team from the first piece charged and trampled under foot a squad that was trying to get a light machine gun going, and by the time they had turned about, picked up a man who had had his team blown from under him by a grenade, and emptied their pistols at some figures running up the farther slope, the limber had been hooked onto the only gun that the battery had been able to get out of abbatage, and they were away, raging and cursing at horses that shied from a running man and so ruined the riders' aim. Five minutes later the gun was in action and, served with ammunition from the limbers, was smacking high-explosive into the place where the Germans had last been seen.

"That was nice work, Gunnison," said the orientation officer. "I'll see that Higher Authority hears of it."

"Lootenant," replied ex-sergeant Gunnison, "fer figgerin' an' peekin' through sights an' killin' a man by arithmetic, we aint much account, but what it takes to get guys out of a mess the old calv'ry is all broke out with!"



The Army Horse Show Team

By CAPTAIN W. B. BRADFORD, 9th Cavalry

Member of the Team

Organization of Team

ON the last day of January, 1927, at the direction of the War Department, Captains F. H. Waters and W. B. Bradford were relieved from duty with the Department of Horsemanship at the Cavalry School and, with Captain Waters in charge, began the selection and assembly of horses considered prospects for the international competitions held in November at Madison Square Garden in New York City. With the helpful cooperation of Major E. W. Taulbee, director of the Department of Horsemanship, stables and crew were chosen and set aside for the sole use of the horse show team.

A few days later the following horses were selected and, with the exception of the first four, assembled in the horse show stables: *Nigra*, *Miss America*, *Jack Snipe*, *Dick*, *Black Boy*, *Babe Wartham*, *St. Paul*, *Joe Aleshire*, *Dick Waring*, *Anita*, *Benny Grimes*, *Hindustan*, *Tantalizer*, *Temptation*, *Joffre*, *Mr. Green*, *Verdict* and *Maudelia*. The first four were horses of greater experience than the remainder and were left in pasture until the number of officers on the team should be somewhat augmented. The remaining fourteen were either absolutely green, of very little show experience, or experienced horses unaccustomed to the Olympia course of jumps, the immediate goal in the training that had been directed.

Conditioning and training began at once and, in general, though only two officers were present to ride, approached the routine outlined in the paragraph relating to training, which appears later.

On March 11, Major Sloan Doak arrived from the Pacific Coast and assumed captaincy of the team. Captain F. L. Carr reported early in April and Major Harry D. Chamberlin at the end of June. In September, just prior to its departure for the east, the team was further augmented by adding to the five cavalrymen already named, two field artillery officers from Fort Sill, Captains Richard A. Gordon and Norman J. McMahon.

Stables and Management

The stable assigned the team had been used several years for quarantine and was in bad repair. It had an interior aisle running down each side, with double open stalls with mangers facing away from aisle-ways. The stalls were clay and the aisle-ways cobblestone.

In the process of remodeling, all mangers were removed and the open stalls on each side of one of the aisle-ways changed to box stalls with feed boxes and water buckets in each. Along the second aisle-way, day stalls were built by placing a bar across the front of each double stall. These were used during the day for grooming and to permit the night stalls to be freshened. The cobblestone aisle-ways were covered with slightly less than two inches of clay and an

equal amount of gravel. They were then wet thoroughly and rolled. The resultant footing was good and lasted well. The interior superstructure of the stable was whitewashed. The exterior of all stalls was painted a battleship gray and the interior woodwork of the stalls given a coat of oil secured from crankcase drainings. The general appearance was neat, light and practical.

Careful attention was given feeding and each horse prescribed for individually. In general, oats and chop were fed four times daily and bran once each week. Hay and water were kept in night stalls at all times. The shoeing, grooming and general trimming up was done by carefully selected men from the 9th Cavalry and the Cavalry Detachment. They worked faithfully and efficiently during the year, and much credit is due them.

Horses

The following horses were in the horse show stable at one time or another during the period of training:

No.	Name	Class	Color	Sex	Height	Age	Breeding	Owner
1	<i>Nigra</i>	J	Bl	M	16	18	Irish	U. S.
2	<i>Miss America</i>	J	B	M	15-2	10	H B	U. S.
3	<i>Jack Snipe</i>	J	Br	G	16-1	18	Coach	U. S.
4	<i>Dick</i>	J	B	G	15-2	15	Unk	U. S.
5	<i>Black Boy</i>	J	Bl	G	15-3	13	Unk	U. S.
6	<i>Babe Wart'm</i>	J-H	B	G	16-2	9	H B	U. S.
7	<i>St. Paul</i>	J-H	B	G	16-2	8	H B	U. S.
8	<i>Joe Aleshire</i> ..	J	B	G	16-½	8	Sdl-TB	U. S.
9	<i>Dick Waring</i>	J-H	B	G	16-2	9	H B	U. S.
10	<i>Pop Over</i>	J-H	B	G	15-2	6	H B	Capt. Carr
11	<i>Anita</i>	J-H	B	M	15-2	9	H B	U. S.
12	<i>Big Joe</i>	J-H	B	G	16	12	H B	U. S.
13	<i>Siren</i>	J	B	M	16-2	6	H B	U. S.
14	<i>Pluto</i>	C-H	Bl	G	15-3	8	H B	Capt. Carr
15	<i>Rex</i>	J-H	Gr	G	16	9	H B	Capt. Bradford
16	<i>Revel</i>	J	B	G	15-2	10	H B	Maj. Doak
17	<i>Misty Morn</i> ..	C-H	Rn	G	15-3	10	H B	Maj. Doak
18	<i>Benny Grimes</i>	C-H	Ch	G	16	7	H B	U. S.
19	<i>Verdun Belle</i>	C-H	Ch	M	16	8	T B	Maj. Cullum
20	<i>Hindustan</i>	C-H	Ch	G	15-3	6	H B	Col. Lorillard
21	<i>Michridate</i> ..	C-H	Ch	G	16-1	6	T B	Capt. Carr
22	<i>Tantalizer</i>	C-H	B	G	16-2	11	T B	Mr. O. W. Lehmann
23	<i>Temptation</i> ..	C-H	Ch	M	16-1	6	H B	Capt. Bradford
24	<i>Peppermint</i> ..	H	Br	G	16-1	9	T B	Capt. Bradford
25	<i>Proctor</i>	C-H	B	G	16-1	13	T B	U. S.
26	<i>Buck</i>	J	B	G	16	12	Unk	U. S.
27	<i>Jerry</i>	C-H	B	G	16	9	T B	Maj. Chamberlin
28	<i>Brown's Best</i>	C-H	Br	G	16	9	T B	Maj. Chamberlin
29	<i>Pathfinder</i>	C-H	B	G	15-2	?	T B	U. S.
30	<i>Garry Owen</i> ..	H-J-C	Gr	G	17	8	H B	U. S.
31	<i>Woodrow</i>	J	B	G	16-1	14	Unk	U. S.

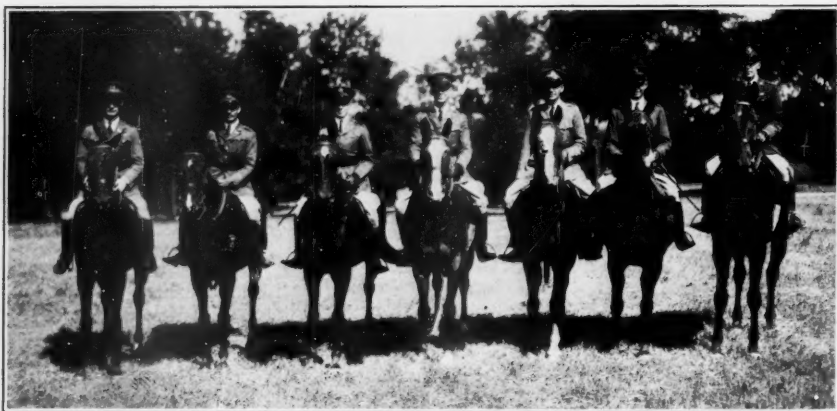
Note: J denotes jumper, C charger, H hunter.

Mr. Green, Verdict, Maudelia and *Joffre*, all of whom were included in the original organization of the stable, were dropped during the month of March.

Training

For a discussion of training, the horses shown in the preceding table may be grouped in several classes.

Nigra, *Miss America*, *Jack Snipe* and *Dick* might be called the more experienced jumpers. The first three represented the United States in the International Class in New York in 1926. These horses were turned into pasture, with night stabling, upon return to Fort Riley from the 1926 campaign. They were brought in in March and their conditioning begun. *Black Boy*, *Babe Wartham*, *St. Paul*, *Joe Aleshire*, *Dick Waring*, *Pop Over* and *Anita* were less experienced. These were kept in condition and schooled from the beginning over the modified Olympia course, and over individual jumps of this course, for



The United States Army Team

Left to Right: Maj. Chamberlin, Capt. Bradford, Capt. Carr, Maj. Doak, Capt. Waters, Capt. Gordon, Capt. McMahon

control, calmness and experience. *Big Joe*, *Siren*, *Pluto*, *Rex* and *Revel* might be called novice jumpers. They were added to the team after the middle of March, and though none was considered material for use in 1927, their conditioning and schooling over single jumps, and combinations of jumps of the Olympia type, was conducted with the idea of developing them for future use. *Misty Morn*, *Benny Grimes*, *Verdun Belle*, *Hindustan*, *Mithridate*, *Tantalizer*, *Temptation* and *Peppermint* were added to the team during the months of March, April and May. They were all hunter and charger prospects and were schooled for balance and precision, and practiced over appropriate single jumps, for steadiness, boldness and experience. *Proctor* was sent to the team from Fort Leavenworth. He arrived a short time before the departure east. He was in good condition and, being an experienced hunter and charger, very little work was necessary. *Buck* joined the team in September, coming from Fort Sill. *Jerry*, *Brown's Best* and *Pathfinder* all arrived late and were not sufficiently prepared to accompany the team. *Garry Owen* and *Woodrow* were sent from Fort Bliss

to join. They are both excellent horses, though *Woodrow* seemed to stand the trip poorly and was never in condition to put forth his best while in the ring.

In the general plan of conditioning and training, both enlisted men and officers took part. Exercising at a walk was done largely by enlisted men. Officers completed this conditioning each day and gave such training as seemed proper. The outdoor exercise was mostly at slow gaits, though officers did such galloping as was required by each individual.

The Olympia course of jumps was placed in the hall twice each week. On the first day, horses were schooled over single jumps of this course. On the second day, schooling was over the entire course, and over single jumps as desired. Hunter and charger courses were set up once each week and all prospects schooled over the entire course, or single jumps, as was appropriate.

On days when there was no jumping, special attention was given to the schooling of all horses, after their preliminary exercises by grooms. They were worked on straight lines and curves for control of shoulders, engagement of haunches and changes of gait and pace. In particular instances, horses were longed over jumps, jumped in the Hitchcock pen, and jumped at liberty over the Olympia course of jumps, arranged in an enclosed figure of eight shute, in an outside riding pen. The jumping at liberty in the Olympia chute proved excellent for those horses inclined to rush their jumps, and for greener prospects.

Toward the end of the period of training, all horses showing especial aptitude for jumping were practiced over the Olympia course with all jumps raised from two to four inches above the requirements of the New York show. The final week at Riley, their work was lightened and they arrived at their first show feeling fit and ready to go.

The Cavalry Tryouts

A very few days before the time set for the departure of the team east, Major R. E. McQuillin, 7th Cavalry, arrived with two horses, *Garry Owen* and *Woodrow*. At the same time, First Lieutenant H. I. Hodes, 4th Cavalry, arrived from Fort Meade with *Monte Carlo*, his private mount. These officers and their horses had done well in the tryouts held in July and August. At the same time, Major Doak, the team captain, was limited in the number of officers that he could take and felt that it would have been unwise to change at the last moment from officers who had been under his observation and training for several months to others whom he had had no opportunity to observe. In future years, it is expected and hoped that tryouts for teams will be held many months in advance. All officers who have done well may then be assembled and from this group, the team captain may finally select his team at his leisure, after due consideration and observation of the work of each.

Bryn Mawr

On September 23, the team left Fort Riley and shipped by express to Bryn Mawr, Pennsylvania. Horses and riders were as follows:

Major Doak—*Dick Waring*, *Misty Morn*.

Major Chamberlin—*Sandy*, *Big Joe*, *Garry Owen*, *Babe Wartham*.

Captain Waters—*Nigra, Proctor, Joe Aleshire, Hindustan.*
Captain Bradford—*Miss America, Benny Grimes, Black Boy.*
Captain Carr—*Pop Over, Jack Snipe, Woodrow.*
Captain McMahon—*Buck, St. Paul.*
Captain Gordon—*Anita, Dick.*

Of the above horses, *Black Boy* was lame and *Woodrow* out of condition throughout the entire trip.

The show was very agreeable and made a pleasant impression on all members of the team. It was held out of doors, and the weather was fine, though rather warm. The main ring is a tan bark preparation, enclosed by rail fence and hedge, with the judges' stand in the center. In connection with this is a very attractive outside hunter course, in which the horse leaves the ring by jumping over the hedge, then a water jump, a bank and rail, a post and rail, wormwood fence, picket fence and final jump back into the ring again. Classes began each morning at 9:00 and lasted until dark in the afternoons. Entries were sufficiently large and the attendance always good. The results at Bryn Mawr, combined with other shows, appear in the table which follows later.

Brockton

From Bryn Mawr the team shipped to Brockton, about twenty miles from Boston. Here again a day show, but this time in connection with the annual State Fair. There are two rings at Brockton, with an acrobatic platform and band stand in between. All is out of doors, and surrounded by a race track for trotting horses. Just across the track from the show ring is the grand stand, seating about sixty thousand people, and always well filled. Within the rings, the ground is good turf. All jumping was done within the enclosure and classes were held in both rings morning and afternoon. The stables at Brockton are most comfortable and commodious, and the horses seemed to enjoy their quarters and surroundings as much as did the officers, who stayed in Boston.

Rye

The next stop was for the Cathedral show, held at the Westchester-Biltmore Country Club at Rye, New York. Rye is one hour by rail from New York City and in a beautiful wooded and rolling country. The show is held out of doors, in a large ring with turf footing and, like Bryn Mawr, has a very attractive outside hunter course about one-half mile long. Here, once again, the team's hunters and jumpers were very fortunate and, at the end of a most agreeable week, horses and equipment were shipped by van to West Point.

West Point

The authorities at the Military Academy were most accommodating and thoughtful. Thanks especially to Colonel Campbell B. Hodges, acting superintendent, and Major H. M. Groninger, head of the Department of Horsemanship, everything was arranged that could possibly have been desired. A set of stables not far from the riding hall, with box stalls especially prepared, was assigned

the team. Men were quartered with the detachment, and officers in Cullum Hall. Every day, for the entire morning, the riding hall was set aside for the use of the team, and the Olympia course of jumps set up whenever required.

With such willing assistance, preparations began at once for the international contests at New York, about three weeks away. Several changes had been necessitated. At Brockton, *Miss America* had been injured. She was not shown at all at Rye and required careful attention to have her sound and ready for

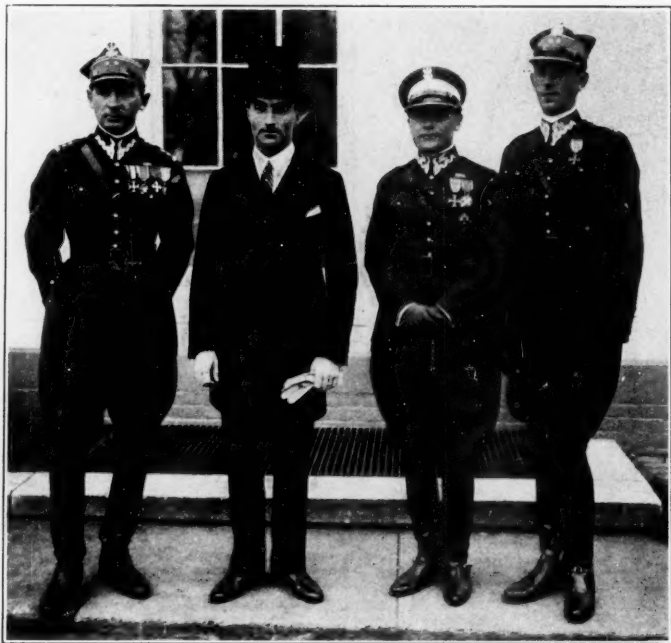


Photo by Harris & Ewing

The Polish Team

Left to Right: Col. Rommel, Minister Ciechanowski, Capt. Antoniewicz,
Lieut. Starnawski

New York. *Black Boy* was still lame, and *Woodrow* out of condition. Captain Carr had been injured at Brockton and was still unable to ride.

A slight rearrangement of horses was made, to give each officer a good prospect for the Olympia team class. *Nigra* was given to Major Chamberlin, as *Garry Owen* was sore from jumping, and it was doubtful if he would go. *Jack Snipe* was transferred from Captain Carr, still unable to ride, to Major Doak. *Pop Over* and *Woodrow*, the remainder of Captain Carr's string, were assigned to Captain Bradford. Captain J. T. Cole and his two horses, *Buckaroo* and *Queen's Own*, both of whom had placed in the Olympia tryouts, were added to the team.

As far as possible, all difficulties were ironed out and, on November 4, the

horses were shipped by boat to New York, arriving the following morning, two days before the beginning of the show.

The National Horse Show

This show was held in the new Madison Square Garden building on 49th Street. It is a commodious place, with a seating capacity of about eighteen



Wide World Photo

Proctor, the Big Ribbon Winner of the Army Team, Capt. Waters Up
Proctor was Undefeated as a Middleweight Hunter in 1927

thousand. At times it is used for prize fights; then a hockey rink; then a circus will be there; and on November 7, it was prepared for America's greatest horse-show. There were from fifteen hundred to two thousand horses entered and all were comfortably stabled in the basement of the building, in temporary stalls erected the day and the night before. Among these entries were horses from Canada, France and Poland. The latter two were the best of the teams from Europe last year, and they, together with the officers from Canada, could be counted on to give our team its severest test. Just how this challenge was met may be seen below.

The American team left the New York show second to Poland in the International team events and quite glad to congratulate these foreign visitors on the excellent character of their jumping. Our team naturally had higher hopes, else it would not have gone, but the disappointment experienced in this class was somewhat alleviated in contemplating the forty-three ribbons that were finally won. Two of these were champions, two reserves, and fourteen blues. Competition was usually international.

Of all the classes in the show, the two of greatest interest from the viewpoint of international competition, were the two team classes over the Olympia course. The first for the Westchester Challenge Cup was of lesser importance and was held on Wednesday night, November 9. In this, Canada, Poland and France each entered two teams. America had three; in addition, there were four civilian teams.

A Polish team was first, with the score of 3. Then three U. S. Army teams, including Captain Cole, with *Queen's Own*, from West Point, with scores of $3\frac{1}{2}$, $4\frac{1}{2}$ and 6, respectively. Fifth place was won by a Canadian team, with the score of $8\frac{1}{2}$. The true import of these scores may be realized when it is remembered that in 1926 the best score made by any team over the Olympia course was five points. This was done by Poland on the night of the International Military Class.

Friday was the night of the International Military Trophy for teams of three officers over the Olympia course. Madison Square was packed for the event. Many army officers of all nationalities were present and the entire First Class from the cadet corps at West Point. The International Class was preceded by a parade of all teams and a brief ceremony. The ring was then cleared and the battle was on. Teams competed in the order: Poland, France, Canada, and last, America. Results were as shown below:

1. Poland			
<i>Fagas</i>	Colonel K. Rommel	1.5	
<i>Redgelt</i>	Captain M. Antoniewicz	0.0	
<i>Jacek</i>	Lieutenant S. Starnawski	0.0	
		<u>1.05</u>	
2. United States			
<i>Dick Waring</i>	Major S. Doak	1.0	
<i>Joe Aleshire</i>	Captain F. H. Waters	2.0	
<i>Miss America</i>	Captain W. B. Bradford	.5	
		<u>3.5</u>	
3. Canada			
<i>Bucephalus</i>	Major R. S. Timmis	4.0	
<i>Golden Gleam</i>	Captain S. C. Bate	.5	
<i>Sergt. Murphy</i>	Captain L. D. Hammond	.5	
		<u>5.0</u>	
4. France			
<i>Pantin</i>	Captain T. A. C. Carbon	4.5	
<i>Laitue</i>	Lieutenant P. A. Clavé	4.5	
<i>Quadrille</i>	Lieutenant G. Briolle	5.0	
		<u>14.0</u>	

Chicago Riding Club

Upon the conclusion of the New York show, the Army team went by van to West Point for several days and from there to Chicago. The Riding Club, built slightly less than three years ago, is in North Chicago on East Ontario Street, about one block from the lake front. The show is held in the club riding hall, about which boxes are built for the occasion and the entire building draped

in red and white. Great Spanish shawls are most attractively draped over the fronts of the encircling boxes during horseshow week. Horses, men and officers were all most thoughtfully cared for and the team looked back on Chicago wistfully as the train headed for Kansas City and the old Dearborn Street station raded into the distance.

Home

Home again. Horses and men all glad to be back and get the feel of the Riley reservation once more. A few days of digging through records and catalogues and finally a table or two prepared, so that all may know just how faithful these horses of ours have been. *Proctor*, for instance, with twenty-three wins to his credit. Unbeaten throughout the year as a middleweight hunter! *Garry Owen* and *Benny Grimes*, who have proven themselves. And *Dick Waring*, *Joe Aleshire*, *Nigra*, *Miss America* and others! How well they do their bit, if only we give them the chance they deserve. Here they are, with records below, and should a horseman stand up to give a toast, what more fitting than to toast this group of faithful companions who are always ready and willing to answer our call?

Individual Record of Each Horse on Trip

Name	Championship	Reserve	First	Second	Third	Fourth	Fifth	Sixth	Total won	Times shown
<i>Proctor</i>	3	1	20	8	2	4	1	....	39	58
<i>Garry Owen</i>	2	12	6	1	1	1	1	24	43
<i>Benny Grimes</i>	1	7	7	4	5	....	....	24	33
<i>Miss America</i>	5	2	3	5	4	1	20	26
<i>St. Paul</i>	4	7	2	4	....	1	18	35
<i>Pop Over</i>	7	3	5	2	....	....	17	28
<i>Babe Wartham</i>	4	6	3	4	....	....	17	31
<i>Misty Morn</i>	2	6	6	1	....	....	15	21
<i>Dick Waring</i>	5	2	4	3	....	....	14	21
<i>Anita</i>	4	2	4	3	....	....	13	23
<i>Joe Aleshire</i>	1	4	1	3	....	2	11	23
<i>Dick</i>	4	2	2	2	....	....	10	22
<i>Nigra</i>	3	3	3	....	....	1	10	24
<i>Sandy</i>	3	3	1	2	....	1	10	23
<i>Hindustan</i>	2	3	2	3	....	....	10	20
<i>Jack Snipe</i>	1	3	3	2	1	....	10	21
<i>Big Joe</i>	2	6	....	....	....	8	15
<i>Woodrow</i>	1	3	....	....	....	....	4	21
<i>Black Boy</i>	1	....	....	....	1	2
<i>Buck</i>	0	11
Total.....	3	4	85	72	53	44	7	7	275	501

Note: Though horses have been arranged in column in accordance with the number of ribbons won, this is not an indication of relative standing. So much must be taken into consideration, as for instance, the advantages that hunters and chargers have over jumpers, that such an arrangement would be very difficult.

Note: In this table, where team or pair classes are considered, each horse of the team or pair has been given credit for the place won.

Corps and Division Cavalry

By LIEUT. COLONEL H. T. BULL and MAJOR G. W. CHIPMAN, *Cavalry (DOL)*.

Instructors, Command and General Staff School

Corps Cavalry

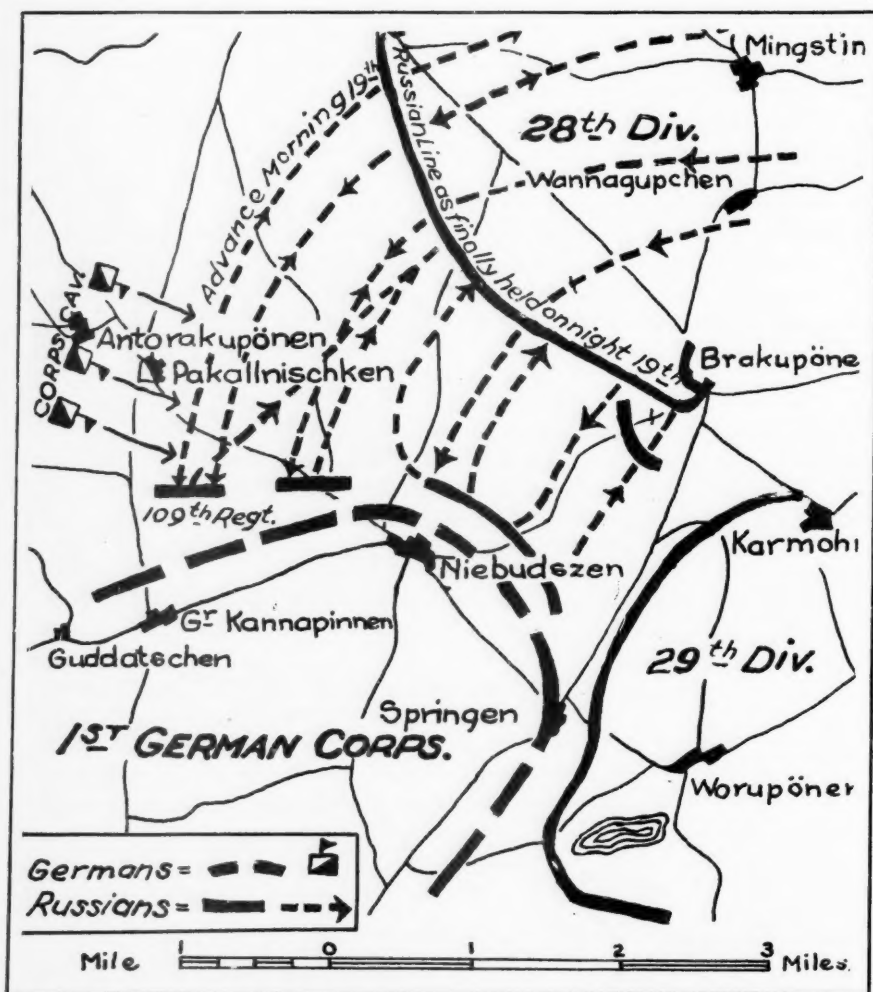
IN our army organization we find no cavalry forming a part of the army corps. In operations where a corps is acting alone or is the flank corps of an army, cavalry will be useful and no doubt will be attached. When attached it will seldom be in greater strength than a regiment, reinforced by machine guns. In a situation where a corps is covering the flank of an advance of the main forces, a force of cavalry of the strength of a reinforced brigade might be necessary particularly for reconnaissance or screening, and for maintaining liaison between the corps and the main forces. At times the corps cavalry may be only a squadron, particularly of a corps forming the flank unit of a larger force. If army cavalry is operating close at hand, the duties usually performed by corps cavalry may be taken over by the army cavalry.

When cavalry is attached to a corps, its functions are mainly reconnaissance and security, but at times it may have missions of counterreconnaissance, combat, or pursuit. On the advance of the corps the cavalry, due to its usual numerical weakness, generally, will not operate at a great distance from the corps. It may be attached to the advance guards of the corps, precede them on reconnaissance, cover the flanks, or be used on some important special mission. When army cavalry is covering the concentration or the advance of the army, corps cavalry will maintain liaison with it, reconnoiter between it and the corps, preventing enemy reconnaissance and infiltrations, and assist in furnishing security for the corps. Corps cavalry of the corps on the flank of an army, when army cavalry is not present on that flank, will have the mission of protecting that flank. When army cavalry is absent and the corps cavalry is covering the front, infantry in trucks may be attached. Especially if the cavalry has a mission that may require combat, such as counterreconnaissance, or when charged with securing important terrain features. Light artillery, armored cars and fast tanks may also be attached for such missions.

When corps cavalry, on reconnaissance in advance of the corps, is stopped by hostile resistance, it acts to clear up the situation as to hostile strength and dispositions and redoubles its measures for protection of the corps. If the corps continues to advance the cavalry will secure favorable terrain for the corps security detachments. If the enemy also advances the cavalry seeks to delay his advance in order that the corps may be given time to dispose itself favorably for action. If the cavalry is driven back on the security forces of the corps its role will be to assist the action of the security forces, to continue reconnaissance of the hostile flanks and rear, and to institute protection of the flanks of the corps.

During battle corps cavalry may constitute a mobile fire and maneuver

unit, maintain liaison between divisions of the corps or with neighboring corps, or may operate on an exposed flank. Prior to an extension of a flank it may cover the movement into position of the unit designated to extend the flank. During the advance of an enveloping force into position it may screen that



advance. If operating on the flank of battle it may be given a mission to operate against the hostile flank or rear, or to assist the friendly unit working on that flank. It may be used to delay the advance of hostile forces. Exceptional conditions may require its use to fill a gap in the line or to restore a line by counterattack. Its employment will depend to a considerable extent

upon the strength and activity of the opposing cavalry. If the corps cavalry is weak in strength it may only perform the functions of reconnaissance and security.

During the break-through and exploitation, corps cavalry initially performs important duties of cooperation with the army cavalry by clearing up small hostile resistances in the area of the break-through, securing successive advantageous positions, and furnishing guides for the exploiting army cavalry. It then follows the army cavalry in order to lead and clear the way for the infantry break-through forces, and serves as a liaison link between the army cavalry and the following infantry. In a corps acting alone in the pursuit the cavalry, on account of its mobility, usually would be used in the encircling forces dispatched to cut off hostile retreat.

In case of retirement of the corps the cavalry is generally placed under the orders of the rear guard commander, who usually uses it to maintain contact with the enemy, protect the flanks, and to fight delaying actions. When the rear guard has been able to break off contact with the pursuing forces the cavalry may be given independent missions of a delaying nature.

Historical Example

An interesting and instructive example of the employment of corps cavalry in combat is furnished by the action of the cavalry of the German I Reserve Corps at Gumbinnen on August 19, 1914 (see sketch). During that day the German corps occupied a delaying position near Gumbinnen with one division deployed on the position and one division in reserve. The regiment of corps cavalry was placed under cover on the left flank of the position. The Russian XX Corps, composed of the 28th and 29th Divisions, advanced to attack the German position, enveloping its left. During the Russian advance, the presence of the German cavalry regiment was not discovered. As the attack progressed to the stage where the enveloping forces were about to close with the troops occupying the left flank of the German position, the regiment of corps cavalry delivered a mounted attack into the right flank of the Russian 109th Infantry Regiment of the 28th Division, which unit was making the envelopment. This surprise attack had such success that the whole attack of the Russian XX Corps was stopped and the attacking forces withdrew to the positions occupied by them prior to their attack.

Division Cavalry

Division cavalry consists of any force of cavalry attached to an infantry division. Cavalry operating with an infantry division, like artillery or engineers, is an auxiliary branch. Its operations are so conducted as to assist the infantry. In general, a force the size of a cavalry squadron, with a troop of machine guns attached, will be sufficient to meet most needs. The following cavalry operations indicate the kind of action to be expected from division cavalry.

Prior to the combat of the division, the cavalry may be employed to reconnoiter hostile dispositions and movements and to obtain identifications,

to cover the advance of the division, to delay the movements of hostile forces, to seize and hold a position in advance of the division, to cover the flanks of the division, or to assist in providing security for the division.

During the combat of the division the cavalry may be employed to reconnoiter the enemy's movements and dispositions, to cover the exposed flank or flanks, to delay or contain hostile reinforcements, to operate against the enemy's flanks and rear, to act as a mobile reserve, or to screen the movement of other troops.

After a decision has been reached in the battle, the cavalry may be employed to reconnoiter the enemy's movements and dispositions, to pursue in case the enemy retreats, to cover a withdrawal from action, or to cover a retirement of the division.

Detailed ground reconnaissance is the duty of the division cavalry. The cavalry precedes the division. The main body of the cavalry is preceded by reconnaissance patrols. The division air service promptly communicates the results of its deeper reconnaissance to the division cavalry; it also keeps the division commander informed of the position of the cavalry. As the division approaches the enemy, the division cavalry withdraws, usually to a flank, and continues reconnaissance toward the flank and rear of the enemy. After battle by the division, the division cavalry is usually engaged either in pursuit, or in covering missions. Reconnaissance is conducted in furtherance of these missions.

Some or all of the division cavalry may be attached to the infantry advance guard for reconnaissance. Division cavalry, however, is used for this duty only when its strength is so weak that it cannot sustain itself in advance of the security forces. Where the division cavalry precedes the division, a squad of cavalry for reconnoitering purposes generally is sufficient to be attached to the infantry advance guard.

When the division halts for the night at some distance from the enemy the division cavalry is not attached to the outpost forces but is held under division control. It remains in contact with the enemy and is so located that it can best carry out its most important duties, such as reconnaissance and security of the division. It may be of advantage to attach some part of the cavalry, such as a platoon, to the outpost forces. In this case the disposition of the platoon would be such as to give it some rest and at the same time reinforce the security by the establishment of a few standing patrols at selected points well to the front.

When the division halts for the night in the immediate vicinity of the enemy, the cavalry may be attached to the outpost and operate directly under the orders of the outpost commander. Its most important functions, when attached to the outpost, are reconnaissance, establishing detached posts at points too distant for occupation by the infantry, observing important roads and trails on the flanks of the outpost, and maintaining contact with a distant enemy. When attached to the outpost, the division cavalry, except that part which is needed for the foregoing duties, is usually withdrawn to some point

well in rear of the outpost line of resistance so that it may rest and care for its animals.

As contact is gained by the division with the hostile forces, the division cavalry generally withdraws to the flanks. When the flanks are exposed, some cavalry is placed on each flank for reconnoitering and security purposes, both in the attack and in the defense. In the attack the division commander usually places the bulk of the cavalry on that flank which will best further the main effort of the division. The strength and location of the hostile cavalry will be factors that must be considered. In the furtherance of the main effort of the division, the division commander gives the cavalry squadron an aggressive mission, where practicable. It should not be sacrificed needlessly, as it must be remembered that it will be of great value to the division after combat, either in pursuit or in covering the retirement. In the defense the bulk of the division cavalry is usually placed on the most exposed or vulnerable flank. In addition, when the hostile cavalry is inferior, the cavalry should operate aggressively in the defense, or be maintained as a mobile reserve for counterattacks, or to assist in covering the withdrawal.

Pursuit usually takes the form of direct pressure combined with an encircling maneuver. Division cavalry usually takes part in the encircling maneuver. A small part may be left to conduct reconnaissance for the infantry engaged in direct pressure. The cavalry may be attached to the infantry encircling maneuver or be given an independent mission. Due to the difference in rates of march, it is not desirable to attach the division cavalry to the infantry in the encircling maneuver. However, this may be necessary when the hostile cavalry is of superior strength and its position is such as to interfere with the march of the division cavalry.

When given an independent mission, the cavalry uses its mobility to reach a position in front of the hostile retreating columns and delay their retreat until the infantry in the encircling maneuver can overtake them. The march objective of the division cavalry is some point or area of vital importance to the enemy in his retreat, such as a river across the enemy's line of retreat, defiles through which the enemy must pass, or a strong defensive position in the enemy's rear. Lacking objectives that possess such obvious advantages, the cavalry is directed against the heads of the retreating columns where a series of delaying actions are fought in order that the infantry may overtake and destroy the enemy.

During a retirement involving a withdrawal from action, the division cavalry may be employed to assist in the withdrawal from action, and later, to delay the enemy's pursuit after the withdrawal from action is effected. If the retirement be initiated by the division when not in actual contact with the enemy, the division cavalry will usually operate, initially, between the rear guards and the enemy.

To guard against an encircling maneuver by hostile forces, the cavalry covers the flanks of the division. When the country is open and routes numerous, flank detachments must be sent to a considerable distance on either

side of the line of retreat. In close country, with few roads, checking the enemy's attempts to avoid the rear guard and strike the retiring columns in flank becomes a much simpler problem. The division cavalry is invaluable for blocking and delaying the hostile encircling maneuver.

When the pursuing force consists entirely of infantry, or is very weak in cavalry, the division cavalry at times operates boldly against the hostile flanks; at other times, it conducts a series of delaying actions against the heads of the pursuing columns, thus securing the time necessary for the infantry to break away from the enemy. Under such conditions it may be kept under division control unless by so doing there results a dispersion of effort, in which case it would be attached to the general covering force to secure coordinated action. The more distance the friendly infantry gains from the pursuing forces the more latitude is given to the division cavalry in acting independently against the enemy.

When the pursuing force is strong in cavalry, it is generally necessary for the division cavalry to remain near the axis of movement. Under these conditions it will often be better to attach it to the covering force to secure coordinated action. When the hostile cavalry is used to constitute an encircling maneuver, the division commander will usually keep the division cavalry under his control. In this case the division cavalry will be used to block and delay the advance of the hostile cavalry in order to prevent it from interfering with the retreat of the division.

In all of these operations the air service keeps the cavalry informed of the locations and movements of the hostile forces involved and also keeps the division commander informed of the movements of the cavalry.

Division cavalry should not be frittered away by being held out for messenger service, but should be used as cavalry in furtherance of the mission of the unit to which attached.

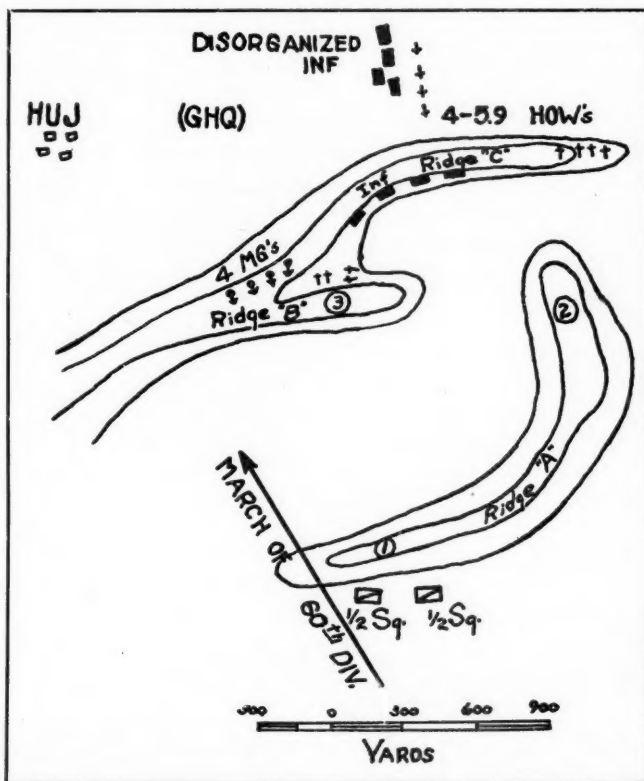
Historical Example

On November 8, 1917, the objective of the British 60th Infantry Division was Huj.

About 2:00 P. M., after pursuing the enemy with great dash, the 60th Division was held up and heavily shelled, with 2,500 yards of open plain to cross in order to reach the enemy's last rear guard position covering Huj. An infantry attack would have been a slow and costly proposition. General Shea, commanding the 60th Division, directed that the cavalry (a force corresponding to about one squadron in our organization) turn the hostile position and silence the guns which were holding up the infantry. The cavalry machine guns had been left behind to find water and had not yet rejoined.

From the southwest end of Ridge "A" (see sketch), position marked (1), the hostile guns could not be seen, but were apparently firing from about 1,200-1,500 yards away, behind a small crest. Ridge "A" appeared to offer a covered approach for a flank attack, and accordingly the cavalry went around in line of troop columns under its shelter to position (2), from where it was seen that a hostile battery was in action at position (3), about 1,000 yards distant, with open ground in between.

The dust raised by this movement had drawn the attention of the enemy, and he swung his guns around to counter the attack. A halt was made at position (2), but the force came immediately under fire from infantry on Ridge "C," about 600 yards away. The leading cavalry unit (a force corresponding to about one troop in our organization) at once charged this posi-



tion, routing the enemy who retreated, leaving a good many men on the ground wounded by the sword. The remainder of the cavalry went straight for the guns, coming under a hail of shell fire and rifle and machine gun bullets immediately upon topping Ridge "A." The attack was completely successful, sweeping over the guns and reaching the top of the ridge in rear.

A large number of the enemy were killed and the captures amounted to one battery of 5.9 inch howitzers, one Austrian field battery, served by Austrian gunners who fought to the last, one mountain battery, four machine guns which did much damage and about 70 prisoners. The British casualties were very heavy, owing to the unavoidable lack of any fire support. The operation was complete in a few minutes, and the 60th Division marched into Huj without further casualties.

New Regimental Organization

By COLONEL AUBREY LIPPINCOTT, *13th Cavalry*

CAVALRYMEN will be gratified to learn that new tables of peace organization for the cavalry regiment will soon be issued. Perhaps these tables will not entirely satisfy everyone—it is hardly conceivable that they, or any others, would; but it is believed that they will appeal to those who study them with an open mind as a great step forward, for they will accomplish two important things, at least, namely, reduce overhead and increase fire power.

In analyzing these tables, the fact must be borne in mind that it is not possible to obtain the ideal in peace organizations, although this may be done, or very closely approximated, in war tables. The reason is not far to seek. In compiling peace tables there are several governing limitations which determine within very definite bounds just what may be done. The most important of these restrictive factors is the total enlisted strength that the War Department allots to the various arms and services. Furthermore, it is to be remembered that the total strength so allotted to any particular arm is not, in its entirety, available for assignment to combat regiments. Thus, in the cavalry, there must first be deducted from its total authorized strength the numbers necessary for such units as the Cavalry School Detachment, brigade and division headquarters troops, the 9th Cavalry, and the clerical force in the office of the Chief of Cavalry. The numbers allotted to the recruiting pool must also be considered. When all of these have been deducted from the total authorized strength, the remainder, divided by the number of combat regiments that are to be maintained, will give the authorized peace-time strength of these regiments. This strength, it is understood, will be about five hundred and ninety-two men per regiment, the exact number depending upon the authorized recruiting strength at the time.

In working out war tables of organization the problem is quite different, since many of the restrictions which must be observed in framing peace tables do not apply. Units may be designed about as it is considered they should be. However, even here there is one important factor that should not be overlooked, namely, it should be possible to develop the war organizations readily and without confusion from the peace units. The new organization of the cavalry will meet this requirement. It will also give us a peace-time regiment that should prove, even if required to take the field in that form, a superior fighting unit, possessing the necessary mobility and yet capable of delivering a more powerful and more flexible fire than the units organized in accordance with the 1921 tables, as modified. This is no theoretical advantage, for notwithstanding our carefully prepared mobilization plans, we may at any time find ourselves unexpectedly launched in a campaign that was not heralded by an M-Day or anything else of a warning nature. Such a contingency occurred in 1915, when a number of our cavalry regiments were suddenly put in the

field under conditions that, in many aspects, were not so very far from, and might easily have developed into, war. The American Army, through no fault of its own, has never yet entered a war properly organized and prepared, and probably never will, so our peace organization should be as effective as it is practicable to make it.

The high points of the new organization are as follows (as outlined in the new tables of organization, based on full peace strength, an army of 125,000 men, and a regimental strength of 690):

1 Headquarters troop.....	78 enlisted men
1 Band	28 enlisted men
4 Rifle troops.....each of	119 enlisted men
(organized into two squadrons)	
1 Machine gun troop.....	108 enlisted men

Looking more into details, the following will be noted:

Headquarters Troop.—This unit has been reduced to the minimum strength deemed adequate. The Wire Section has been eliminated and all other sections somewhat skeletonized. Thus the Pioneer and Demolition Section is to have four men only—simply a nucleus of trained specialists; and the Radio and Panel Section is given sufficient personnel to operate two sets only. In this latter connection it is believed that with the great number of young radio amateurs in this country it would not be difficult to expand this section in time of war.

Should a squadron be detached from the regiment, the necessary staff and communication personnel from the Headquarters Troop would accompany it. Similarly, in combat, the squadron commanders would obtain the necessary messengers from this troop.

The Rifle Troop.—This is to consist of a troop headquarters, three (3) rifle platoons of three (3) squads each, and a machine rifle platoon of three (3) squads.

The Squadron.—Two rifle troops will constitute the squadron. The squadron headquarters will consist of a major and captain (adjutant) only.

The Machine Gun Troop.—Lack of practical knowledge or experience with machine guns has led some cavalry officers to look upon these weapons with indifference, or even hostility. The objection usually advanced seems to be based on a hazy misconception as to their mobility. It is believed that when we have had the opportunity to work with machine-gun units these objections will disappear, and then these weapons will be recognized by everyone as equally essential to modern cavalry as they are to modern infantry. Furthermore, we will then learn more about their tactical employment.

The machine gun troop, which is to form a part of the new cavalry regiment, will be a much stronger organization than the present peace-time unit, as the number of machine guns is to be raised from four to eight. This is to be accomplished with a relatively small increase in the enlisted strength of the unit by reducing the number of ammunition pack animals (and corresponding

drivers) in the machine gun troop. Men who perform these duties are easy to train, and the necessary number of ammunition packs could be added without difficulty in time of war.

An important addition to this troop, the need of which is becoming more and more evident, will be a section equipped with a weapon capable of dealing with armored cars and light tanks. The exact type of weapon to be carried has not as yet been determined, but it is understood that development work will soon be started.

Transportation.—The number of cavalry escort wagons has been reduced from twenty-one to fifteen, the spring wagons from twelve to six, and studies are now being made by the Cavalry Board with a view to eliminating much of the impedimenta now being carried. Wagons and wagoners are to become part of the several troops as they were before the service troop was created. The regiment is also to have three one and one-half ton trucks and three light cross-country cars.

The above are the salient points of the proposed peace tables. There will, of course, be changes due to fluctuations in the authorized enlisted strength and to periodical modifications in the allotment of non-commissioned officers and specialists, but these will affect details only. The feature that will strike everyone is the great reduction in overhead. The placing of the wagons and wagoners in the combat troops eliminates the large number of men now required to take care of the needs of the service troop. The eliminating of the wire section from the headquarters troop rids us of a lot of unnecessary and useless "plunder" and adds several men to rifle units. The cutting out of the present over-organized squadron headquarters' detachments effects another material reduction in overhead, so we find a regiment of comparatively small size yet possessing real combat power.

Soon after its arrival at Fort Riley from Fort D. A. Russell, tables for the reorganization of the 13th Cavalry along lines very closely approximating the ones under discussion were received from the office of the Chief of Cavalry, and the regiment is now organized accordingly. All tactical problems and exercises so far held have demonstrated the fact that even the peace organization provides a regiment very strong in fire power, sufficiently flexible to permit the handling of a tactical situation in a variety of ways, and with practically the same mobility as the present units.

Additional Notes on Reorganization

By COLONEL ROGER S. FITCH, *Cavalry*

THE 13th Cavalry is the first cavalry regiment in the army to try out the new peace-time organization which becomes effective for the Regular Army Cavalry on February 1, 1928. To Colonel Lippincott and the officers and men of the 13th Cavalry are due the thanks of the cavalry branch

for their constructive criticisms, hearty cooperation and unprejudiced try-out of the new organization.

The fire power of the new regiment (at peace-strength) has been increased from the equivalent of two rifles to every three men, to the equivalent of one rifle to every man. The actual figures are based upon the decidedly conservative assumption that the fire power of one machine gun is equivalent to that of fifteen rifles, and the fire power of one machine rifle equivalent to that of three rifles. Nevertheless, even with this very pronounced increase in fire power, the mobility of the regiment has been retained.

The determination of the peace-time number of squadrons in the regiment and the number of troops in the squadron was necessarily largely controlled by the limitations governing the total strength of the cavalry arm, the number of regular cavalry regiments that must be maintained, and the desirability of having troops that are big enough to be real fighting units even at peace strength. An organization permitting of ready transition to war strength is, of course, essential, even though, under the mobilization plans, such transition is not expected to take place on M-Day.

When war breaks it is expected that the regiments will take the field at peace strength only. It is contemplated that at the same time the necessary steps will be taken to begin the organization at home of an additional squadron for each regiment. It is expected that this third squadron will consist of two troops and that its organization will be along the same lines as the peace-time squadron. Its two troops will, however, be much larger, each numbering at least one hundred and sixty men. It is further expected that recruits and remounts sufficient to bring the other two squadrons in each regiment up to a similar strength will also be trained at home, as well as such additional personnel as is necessary to bring the machine gun troops and the headquarters troops up to war strength.

The three-squadron war organization, with its two large troops in each squadron, will result in keeping troop overhead at a minimum, and yet, by the increase in the size of each troop and with a suitable organization, it will enable each troop upon occasion to be divided into two parts tactically, thereby in effect giving us, so far as tactical situations are concerned, our pre-war regiment of three squadrons of four troops each. In addition, the new regiment will, of course, have its machine gun troop, with an increased number of guns, so organized as to be readily split up into appropriate machine gun platoons for attachment to squadrons as needed or, under certain circumstances, for use as a single unit. It is, in fact, thought that in war each squadron may be handled tactically as if it consisted of four troops (of not less than eighty men each), while administratively and so far as supply is concerned, it will consist of but two troops (of at least one hundred and sixty men each). This gives, as stated, practically our pre-war squadron organization, and in campaign this method of tactical handling will, it is believed, be the rule rather than the exception.

A war-strength regiment, organized as indicated, with its three squadrons,

each consisting (for all practical purposes) of four troops, and with its fire power augmented by a considerable number of machine guns, will make a formidable fighting force of practically unimpaired mobility and with far greater fire power than any previous cavalry regimental organization.

The Cavalry Board is now working on the war-strength tables of organization, based on the new peace-strength tables. Upon completion it is intended to try them out at the Cavalry School and in the Cavalry Division.

Pending the distribution by the Adjutant General of approved copies of the new tables of organization (peace), advance photostat copies have been sent by the Chief of Cavalry to all regimental commanders of the Regular Army. These new tables affect, as stated above, the Regular Army only. The organization of the Organized Reserve Cavalry is based upon war-strength tables. Any necessary reorganization of the Organized Reserve Cavalry regiments will undoubtedly be directed by the War Department in due time after the approval and publication of the new war-strength tables now being prepared. The National Guard, of course, has its own tables, based upon the War Department tables. Any changes in its cavalry organizations will presumably be deferred until the completion of the Regular Army war-strength tables and such new National Guard tables as may be prepared by direction of the Chief of Militia Bureau.

THE GOODRICH TROPHY



This Beautiful Bronze Statuette, 1½ by 2¼ Inches, was Sculptured by Mr. R. Phimister Proctor and Presented by Major L. E. Goodrich to the Most Efficient Cavalry Troop of the Year. It was won in 1926 by Troop F, 3rd Cavalry

The 2d Cavalry in France

By FIRST LIEUTENANT REDDING F. PERRY, *Cavalry*

AS the 2d Cavalry was the only cavalry regiment that saw any action as cavalry during the World War, it might be of interest to the service to present a short résumé of this regiment's activities in France.

While the actual combats participated in by this regiment were few, it must be remembered that our participation in the war during the year 1918 was almost exclusively on highly organized and wired fronts and, with the exception of the St. Mihiel advance and possibly the retreat to the Vesle, no opportunities for open fighting presented themselves until the last few days of the war. Then unfortunately our very small force of mounted cavalry had been dissipated on various duties and scattered over most of France, so that it was not available as a unit.

While no great tactical lesson will be drawn from these minor encounters, it may be of interest to know what they were and how they occurred. The various types of duty these troops performed and the innumerable difficulties encountered show that in the immense organization of the A. E. F. they played their part. Being as amazingly scattered throughout France as they were, it is a wonder that they ever functioned as cavalry at all.

Before taking up the movement of the regiment to France, it may be of interest to note that in the first contingent that landed in France with General Pershing from the S. S. Baltic on June 13, 1917, was a detachment of sixty-seven enlisted men. Of these thirty-five were cavalymen; thirty-one from the 2d Cavalry, one from the 8th Cavalry and two from the 5th Cavalry. While the cavalry took a decided slump in getting overseas later on, they were well represented in the first contingent. Still later, in 1918, twenty men and one officer were detailed from Troops A and C as guard for the Commander-in-chief at Chaumont.

The Voyage to France

In the early spring of 1918, the 2d Cavalry was stationed with the 1st Squadron at Fort Myer, Virginia, and the remainder of the regiment at Fort Ethan Allen, Vermont, under command of the late Major General Dickman. Upon receiving orders for overseas, the regiment, in two groups, embarked late in March from Hoboken. The 1st Squadron landed at Brest, April 7. The 2d Squadron, less Troop E, the 3rd Squadron and the Headquarters, Supply and Machine Gun Troops landed at Pauillac, an outer harbor of Bordeaux, on April 6. No horses were carried, as bottoms were too scarce. Troop E and detachments were left at Fort Ethan Allen and a detachment from Troop D at Fort Myer to bring over the animals. This was never done, as the War Department decided against it, and these elements followed on a later convoy, embarking May 10.

The trip over was an uneventful one for the 1st Squadron, but the other

part of the regiment on the S. S. Martha Washington, when one day off the French coast, had a brush with submarines. Considerable gun fire ensued and it was reported that one submarine was sunk, this being one of the three submarines sunk by the United States Navy during the war.

Several amusing incidents occurred during the excitement of the firing and the call to station. The firing occurred just as the troops were going through the mess line for dinner. One trooper had just filled his mess kit with a generous portion of "slum" and was holding his hat in his other hand. On the explosion of the guns, he cast his hat overboard and, hastily putting the mess kit on his head, appeared at his life boat station, presenting the appearance of a cake well pasted with caramel. A sentry near the bow gun was so interested in watching the submarine that he failed to notice that the gun crew had swung the gun to fire at the submarine off the stern. The gun, going off with the muzzle a few feet abreast of him, blasted him down a hatchway where he came to with his overcoat ripped off by the muzzle blast. A few enterprising troopers, evidently indifferent to submarine dangers and keen on the better things of life, raided the galley during the excitement and made away with all the pies that were to be served for dinner.

The 1st Squadron

The 1st Squadron, upon arriving at Brest, was stationed for a short while at Pontanezen Barracks and then moved to Laneuville near the St. Mihiel salient. Here the squadron remained for two weeks, with routine garrison duties, and then Troops A, B and C moved to La Courtine, where they operated a remount depot. Troop D was detached to Angers, but later returned to the squadron at La Courtine. The entire squadron was busy constructing remount stables, caring for wounded and run-down horses and clearing them to front line divisions.

July 17 Troops A and C were attached to the First Army and stationed at Marcie Farm and La Ferté-Sous-Jouarre. These two troops remained here until July 29, where they were engaged in furnishing small detachments to escort prisoners of war, for reconnaissance patrols and for military police duty. These two troops, continuing on this type of work, were next moved forward at Bazu des Ferres and, following the advance to the Ourcq, were stationed at Fère-en-Tardenois from August 5 to 13. During all this period they were on patrol and military police duty. North of Bazu St. Germain on August 1 they sustained their first casualties, when Captains Shelton and Gay were wounded by shell fire while conducting a patrol.

After the Aisne-Marne offensive, Troops A and C, still under the 1st Army Corps, moved to Liverdun on the east of the St. Mihiel salient. They were on military police duty during the preparation for, and through, the St. Mihiel operation.

After St. Mihiel, Troop A marched to Vraincourt on the Argonne front, where it remained until October 31, being split up into fourteen detachments on various military police duties and guarding ammunition dumps. In No-

vember Troop A moved forward and maintained a patrol line to pick up stragglers in the vicinity of Harricourt and Châtel-Chéhéry until the armistice.

Troop C marched from St. Mihiel to les Islettes, on the Argonne front where it was on military police duty until October 19, when it moved forward and maintained a straggler line at Charlepaux, Cornay and Buzancy. In November two platoons from Troop C were attached to the 77th and 80th divisions for patrol and reconnaissance duty. The platoon under the command of Lieutenant Thomas was attached to the 319th Infantry of the 80th Division from November 3 to 16. "It rendered valuable service north of Buzancy by carrying out patrol work along the entire divisional front and riding into machine gun and artillery swept areas time and time again and drawing fire in successful effort to aid the advance of the infantry by locating machine gun nests and enemy parties digging in." This patrol of seventeen men suffered two casualties and five horses killed. Lieutenant Thomas and two noncommissioned officers were recommended for the Distinguished Service Cross.

Troops B and D remained on remount duty at La Courtine until August, when they joined other troops of the 2d Cavalry at Gièvres which were constructing and putting into operation a large remount depot there. Troops B and D remained at Gièvres a short while and then moved to Camp Jeanne d'Arc with the provisional squadron which was formed there.

The Regiment (less the 1st Squadron)

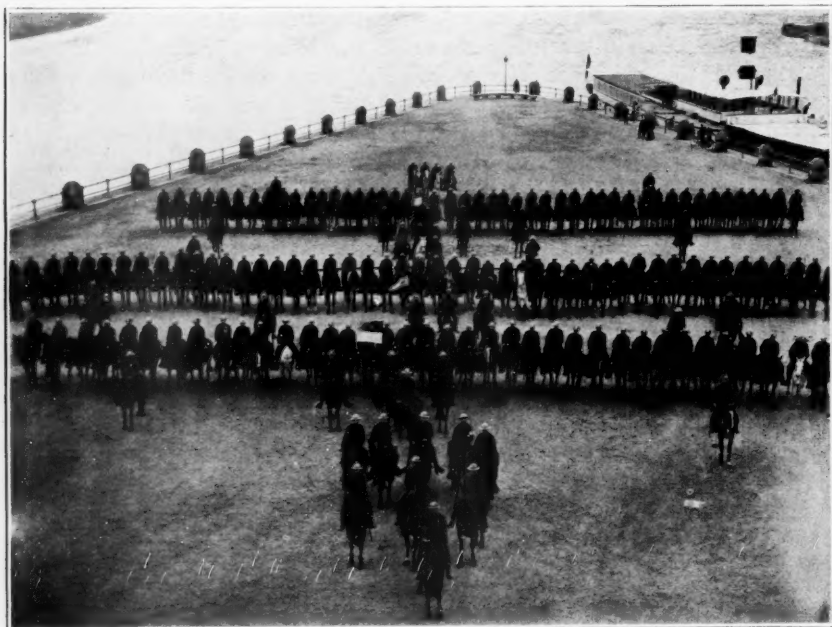
To return to the activities of the other part of the regiment which landed at Pauillac, they were stationed at Camp Genicart and then entrained for Gondrecourt. While en route for Gondrecourt, Troops F, G, H, I, K and L were detached, leaving only the Headquarters, Supply, Machine Gun and M Troops to arrive at Gondrecourt. On April 23 Troop M was sent to the south of France to bring up some horses and on April 24 the Headquarters and the Machine Gun Troops moved to Valdehon, in the Vosges mountains, and began operating a remount station here.

Troops F and G were detached and stationed at Badmenil, in the Baccarat sector, as divisional cavalry of the 42d Division, then in the line. They remained at Badmenil until May 6 and then rejoined the regiment at Gièvres. Troop F later went with the provisional squadron to Camp Jeanne d'Arc. Troop G was stationed at Epinal, operating a remount station under the III, V and VII Army Corps until the armistice. While Troop G was at Epinal, the town was bombed by aeroplanes every few days and the troopers were very active in extinguishing fires and rescuing French civilians from their wrecked homes. After the armistice Troop G was on military police duty over the Argonne battlefield until their return home.

Troops H and I were detached and assigned as divisional cavalry to the 2d Division, then in line in the Toulon-Troyon Sector. They were stationed in the vicinity of Camp Cinq du Freres near Souilly and remained here until May 9. This divisional cavalry duty with the 2d Division consisted largely of relieving a stevedore outfit, which had been incapacitated by an epidemic

at the rail-head near Souilly. Upon leaving this station Troop H rejoined the regiment at Valdehon and moved back with it to Gièvres. It then became a part of the provisional squadron at Camp Jeanne d'Arc.

Troop I, upon leaving Souilly, went to Selles-sur-Cher, where it was on remount duty and training for mounted combat until July 29. It then entrained for Dommartin-en-Goele but, detraining at Château Thierry, was assigned to the III Army Corps, with which it remained throughout the war. Being assigned to the 10th French Cavalry for patrol work along the front and camping in Les-Près-Fermes, which was nicknamed Death Valley and



Provisional Squadron, Second Cavalry, in Coblenz, Germany, After the Armistice

subjected to heavy shelling, Troop I at once began sending out men with the French patrols. It worked with the French until August 7 when, at Arcis-le-Ponsart, it began independent patrolling along the line held by a brigade of the 3rd Division on the Vesle. It continued on this work until August 16, when it was moved to Coulgonnes on military police duty. It then moved back to the Marne where it patrolled and did military police work until September 10.

While patrolling on the Vesle front, patrols were sent daily to the front lines along the river and into Fismette to bring back information of the enemy and our own troops, as well as of the condition of the bridges over the Vesle. This was very hazardous work, especially as the abandoned aviation field south

of Fismes, across which the patrols rode at a dead run, was under constant artillery fire. It is said that one trooper, not being satisfied with the extended gallop, jumped off his horse and tried his speed at running on foot. While on this work the troop lost four men wounded and several gassed. On August 9 Lieutenant Rodwell, while crawling out in front of the first line, east of Fismes, was sniped at. Returning to the lines, he borrowed a one-pounder and knocked the sniper out of a tree.

On September 10 Troop I left the Marne and marched to the Argonne, where it was on military police duty (traffic control and enforcing camouflage orders) until the drive commenced September 26. During the offensive this troop was on traffic control and patrol duty. On the first day two troopers captured eighteen Germans in the Bois-de-Forges. The troop next headquartered at Esnes, where it was subjected to long range shelling. On the night of October 7-8 it lost one killed and two wounded (the man killed being a replacement who had joined that afternoon). The casualties were small, considering the intensity of the shelling. One man's shelter tent showed forty-nine holes from shell fragments while the occupant of the tent was unscratched. Troop I moved forward to Cuisy and Bantheville, continuing on military police and patrol duty, under the III Army Corps until the armistice, when it turned over its horses to the provisional squadron and moved back to Dun-sur-Meuse where it drew other horses and began its march into Germany. This troop reached the Rhine at Remagen and was the first, or among the first, American troops to reach the Rhine.

Troops K and L were detached from the regiment April 13 and ordered to Menil-la-Tour as divisional cavalry of the 26th Division. They were attached to the 52d Brigade and stationed at Joy-sous-les-Côtes. As this place was subjected to bombing and long range firing, considerable concern was evidenced by the brigade commander when the troops arrived without helmets or gas masks. They were immediately supplied. The troops remained here and trained, with the expectation of being used in the trenches, until the end of the month when Troop L moved to Selles-sur-Cher and Troop K to La Celle Breure on remount duty. Troop K remained at La Celle Breure operating a remount station, which sent horses to units at the front, until November 1 when it moved to Gièvres. A platoon was detached for a while at Valdehon.

Troop L was moved to Valdehon, Bourges and La Celle Breure and in August was at Gièvres. In November Troops K and L were ordered to join the Second Army, then in front of Metz. Arriving there about November 11, these troops were used to comb the battle areas for stragglers and returned prisoners. They formed a patrol line from Fresnes to Mars-la-Tour. Troop L was later sent back to Commercy to start a school for the care of animals, while Troop K continued on patrol duty until Christmas. After Christmas Troop K moved north to Conflans and, during these bleak winter months, patrolled the country north through the Briey Basin. In the spring Troop L joined Troop K at Commercy, where they remained until April,

when both moved to Royaumeix for guard and patrol duty and from here joined the regiment for the return home.

Troop M, upon its return from Bordeaux, where it had gone to bring up horses in April, rejoined what was left of the regiment on remount duty at Valdehon and later was assigned to the IV Army Corps. It performed remount duty at Neufchâteau and Pagny-sur-Meuse. It then joined the provisional squadron at Camp Jeanne d'Arc and was on military police duty during the St. Mihiel offensive and also evacuating prisoners and wounded horses. It then was stationed at Sanzey in the old Toul sector with the job of evacuating wounded horses from the base hospital at Toul, and of training for mounted combat, until the armistice when it marched into Germany.

When the regiment was sent practically to the four corners of France in



Type of "Cavalry Country" Encountered in France

April, the Headquarters, Supply and Machine Gun Troops operated a remount station at Valdehon. With several troops which rejoined for a short while, it continued on this work until August when, leaving the Machine Gun Troop at Valdehon, it moved to Gièvres. There, with different troops of the regiment, it built and started operating a large remount depot. In this work was included digging a 7,000-foot water line. During the latter part of the Argonne offensive, the Headquarters and Supply Troops were stationed at Rarencourt and Camp Mallery on the Argonne front, but they seemed to have no connection with the troops operating on the Argonne. During these movements, the band remained intact and lost no opportunity to give its services by playing in Red Cross, Y. M. C. A. and Knights of Columbus huts.

Troop E, which had been left in the United States to bring over the horses, landed at Brest May 23 and was immediately pressed into military police duty, on which it remained at Brest and vicinity until November 15.

This work consisted of debarking and guiding troops to rest camps; on this duty Troop E handled over 750,000 men. During the influenza epidemic at Brest, it did not have a man sick. On leaving Brest, Troop E was moved to the old front on military police duty, where it remained until February, when it was used as train guards on leave trains running to Nice and the Riviera, on which duty it remained until its return home.

In the above involved but sketchy description is seen to what extent the majority of the regiment was scattered through France and on what a variety of duties at innumerable places the troops were engaged. Their work varied from front line duty in the heavy fighting at Fismes, through the rather humble stevedoring at Souilly and ditch digging at Gièvres to the pleasant work of riding down to the Riviera. But in all this wandering over France and old jobs, six troops were with combat divisions and corps and performed the dangerous, but not spectacular, work of military police duty and patrolling. Two troops operated for short periods on active fronts and rendered valuable services in patrolling and liaison work.

The St. Mihiel Operation

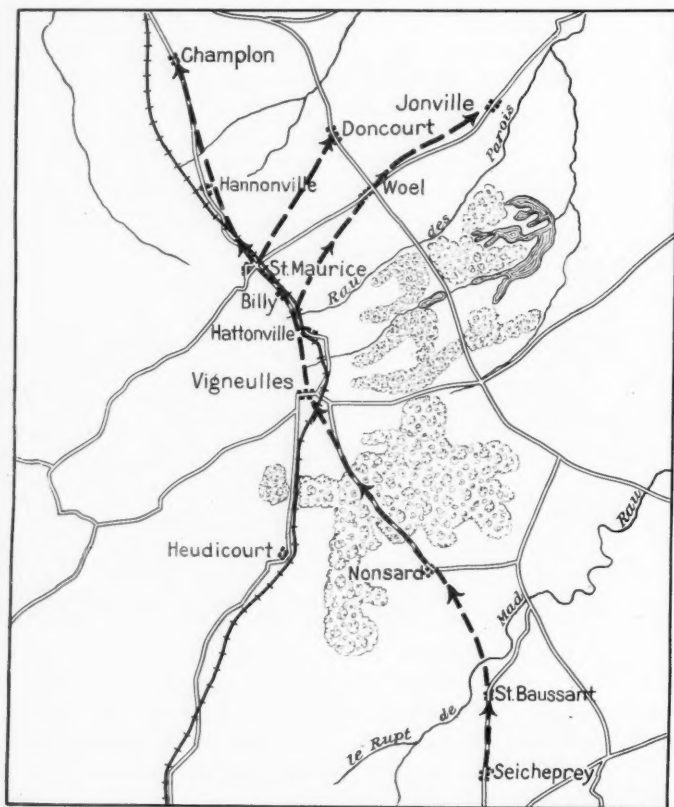
Beside the activities described above, a provisional squadron was formed prior to the St. Mihiel offensive. This squadron consisted of B, D, F, and H Troops, which were taken off construction work at Gièvres and mounted on horses out of veterinary hospitals. These horses were practically all convalescent from gunshot wounds, gas, mange or influenza and, being in bad flesh to say the least, were not in condition for field service. In addition forty of the animals were white. Immediately after drawing these horses on August 22, the squadron left Gièvres and moved by rail to Neufchâteau. On detraining at Neufchâteau, Troops B, F, and H in two days marched to Dommartin. Troop D, having drawn its horses from a veterinary hospital near Neufchâteau, joined the squadron later.

The squadron was stationed in an old cavalry barracks, called Camp Jeanne d'Arc, and here the officers immediately began to whip the green men and mounts into shape for mounted combat. Small combat problems were fired and one automatic rifle was issued to each troop, with an improvised set of fours to man it and to carry 2,500 rounds of ammunition.

This training continued until September 8 (in all about ten days), during which period the squadron was reviewed by General Dickman. An indication of the inadequacy of the training and the poor condition of the mounts was shown in this review, the squadron not being asked to pass in review at a gallop as the horses and some of the recruits were not up to it. This is in no way a reflection on the organization, or the trained personnel, as it is obvious that, with sick and untrained horses and a large percentage of recruits, ten days' training under adverse conditions was all too inadequate. The strength of the squadron at this time was fourteen officers and four hundred and four enlisted men.

On September 9, Troop B was detached and marched to Menil-la-Tour,

where it reported for liaison and courier duty with the 1st, 42d and 89th divisions. The troop performed hazardous duty under shell fire in carrying messages and doing military police duty. On September 13, it moved to St. Benoit, where it was engaged on the front line, and on the 14th moved to Pannes on the same duty. It continued patrolling from here until September 19, when it began its march to the Argonne. At Pannes the troop found a large Ger-



Sketch No. 1

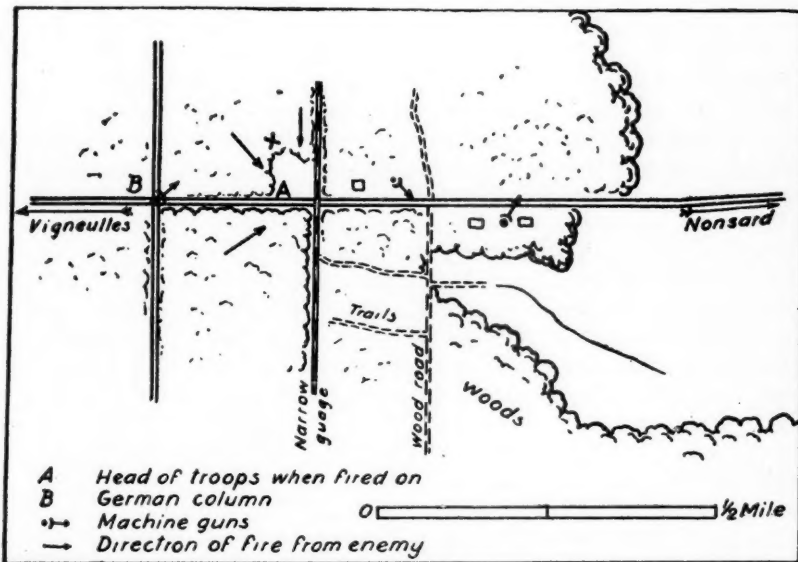
man dump from which they enjoyed many luxuries. An interesting item in this dump, that belied Germany's lack of fats, was quantities of American Ivory Soap.

On the night of September 9-10 Troops D, F and H moved by night marching to Rangeval Forest and, after a long and arduous night march, reached its destination on the night of September 10-11. It again moved on the night of September 11-12 to its designated position west of Mandres and was assigned to the 1st Division.

On the morning of September 12, the infantry attack having progressed so favorably, these troops were ordered up to Seicheprey at 12:00 Noon and at 12:15 P. M. were moved forward to Nonsard, which was five miles behind the original German front lines. (See Sketch No. 1.)

At about 4:00 P. M., orders were received for these three troops to reconnoiter toward Vigneulles and to cut the Heudicourt-Vigneulles railroad. This mission was beyond the ability of these troops, as their only equipment for demolition was a few hand grenades. Had they succeeded in reaching the standard gauge railroad, they would very probably not have been able to destroy it.

The reconnaissance towards Vigneulles was immediately begun and a



Sketch No. 2

patrol sent out towards Heudicourt. The three troops were disposed with Troop F as the advance guard and Troops D and H as the main body. The formation of the advance guard was a point of four men, followed at 75 yards by the advance party of twenty men in two columns of troopers on either side of the road. The remainder of the advance guard were stretched out in groups of eight men at 100 yards distance. Two flank patrols were sent out at 250 yards on the left flank to cover it, but no patrols were sent out on the right as this was specifically ordered against. Upon entering the Bois de Nonsard, heavily wooded, one German was killed by the point. (See Sketch No. 2.)

An unimproved road was encountered leading off to the left and Captain Harmon, reconnoitering down this road, found horses "hitched to wagons of supplies and everything indicating a most hurried departure or the

enemy to still be in the immediate vicinity." Here Captain Harmon captured a mounted German. After reconnoitering this unimproved road, the advance guard commander returned to the main road and found the advance guard halted, as an erroneous order to halt had been passed forward. At this time Troop H, the second troop in column, broke out of the woods to the left and ran onto the main road between the advance party and the support of the troop acting as advance guard. This added more confusion to that already caused by the false order to halt, and the two troop commanders decided to ride about seventy-five yards ahead to a small crest and reconnoiter.

Upon reaching this crest, they saw a military road crossing the main road at right angles. This road was crowded with troops, artillery and wagon trains, pulling out of the salient to the east. It was decided to put down the two automatic rifles at this point, to fire on the column at the crossroads and to attack the head of the column with a pistol attack, deploying the two troops to the right of the main road. The automatic rifles opened fire and inflicted some casualties at the crossroads; the Germans were seen to deploy; and the mounted troops received fire from the front and from both flanks. This fire could not be located on account of the thick brush. The troops were ordered back, with an idea of forming a dismounted line on the unimproved road, and as the troops moved back in good order they were fired on by machine guns from the right flank (unreconnoitered) and then from the left flank by a machine gun, which had evidently laid low in the brush and been undiscovered by the left flank guard. The untrained horses bolted and the two troops streamed back through this machine gun fire. Both German gun crews were put out by mounted fire. This fact is substantiated by numerous statements, and in the advance next morning these guns were seen with their dead gun crews. The troops lost one killed, one prisoner, three wounded, two horses killed and five wounded. Ten prisoners were captured and six machine gunners killed.

Private Valondry of Troop D had his mare shot. The mare going down on her knees threw Valondry, whose foot was caught in the stirrup. The mare, recovering, dragged him for quite a distance, until she finally went down. Valondry then disengaged himself and, drawing his rifle and firing over his horse's body, inflicted casualties on a machine gun crew. For this action Private Valondry was recommended for the Distinguished Service Cross.

The troops were rallied at the edge of the woods, and at this time a sergeant of Troop F reported in with nine prisoners he had captured near Heudicourt and reported the town full of German troops. As it was almost dusk at this time, the three troops fell back to Nonsard for the night.

At 5:00 A. M., September 13, the troops were on the march towards Vigneulles. After passing through Vigneulles, which had been captured by troops of the 26th Division and later entered by troops of the 1st Division, Troops D and H, on September 13, were sent on a mission of scouting the country west and south of Vigneulles for stragglers from the retreating Germans. This work was done, although few prisoners were taken. Many evidences of

most recent occupation by Germans were found, such as fires still burning and forage in the mangers. In one woods fifty machine guns were collected by Troop H. A junction was made at Heudicourt with French cavalry, which was advancing from the north.

Troop F was given the mission to proceed north along the main line of the Metz railroad, to gain contact with the enemy, to ascertain his new line of resistance and to gain contact with the French, who were expected to come through from the west of the salient.

Troop F moved out and, advancing rapidly in open formation, passed through Hattonville. This town was in flames and deserted, except for two Germans in a barn, who fired on the point. One squad turned out of column and, dismounting, surrounded the barn and killed one German and captured the other. The next town, Billy-sous-Côtes, was on fire, and here a battery of field artillery was captured in the act of limbering up; twenty prisoners were taken. The troop then pressed on to St. Maurice. A number of Germans were in the town when the troop charged through and established outposts on the exits of the town. Twenty-five prisoners were captured here and valuable information obtained as to the German withdrawal. Operating from St. Maurice, patrols were sent out toward Champlon, Doncourt and Jonville.

The patrol on Champlon, under Lt. Dockler, gained contact with the French (incidentally the 2d French Cavalry) at Hannonville. The patrol on Doncourt established the fact of resistance there by drawing gun fire from the town. It reported wire in front of the town and killed one and captured another German, who fired on them from a shell hole. The patrol on Jonville was fired on from Woel and, capturing five prisoners, remained out until they were reinforced by fifty men, when Woel was attacked dismounted. It proved to be held by only five stragglers in a church, and these were captured. A patrol was then sent towards Jonville. It brought back the report that it was fired upon and that through field glasses wire was seen being put up in front of Jonville.

The German resistance was definitely established and contact was made with the French; messages were sent back to this effect. The troop at 7:00 P. M. marched back to Vigneulles, and in passing through the town were refreshed by the doughboys, who gave each trooper a sack of German bread and three bottles of beer, gleaned from the German stores captured there.

Troops D, F and H camped in a field near Vigneulles, and on September 15 began their march back to Menil-la-Tour, where the squadron rested for two days.

For this work, the squadron received a letter of commendation from the corps commander and was cited in divisional orders. In Lieutenant Colonel Hazzard's report on this operation, dated September 17, it is of interest to note that recommendation is made that each troop be equipped with six automatic rifles and six led horses for ammunition; that fifty men in each troop be equipped with hand grenades, and that a demolition pack be improvised for each troop; also the observation that cavalry cannot be maintained at combat

efficiency if used between times as military police and prison guards; and the observation (amounting almost to a complaint) that several couriers had their mounts taken forcibly away from them by line and staff officers, leaving the troopers without a mount or with an unserviceable one.

The Meuse-Argonne Operation

September 17 Troops D, F and H (Troop B joining en route) began by night marches to move to les Islettes, on the Argonne front. Upon arriving there they were assigned by the V Army Corps to the 35th Division. On September 23 they were ordered to Rarencourt-en-Argonne. Here the troops remained until the morning of September 26, when, at 2:00 A. M., they moved forward to the position assigned near Aubreville. The mission assigned the cavalry was to follow the 70th Brigade of the 35th Division at one kilometer and to be prepared to move forward on missions of reconnaissance and exploitation upon orders of the division commander. The strength of the squadron was fourteen officers and three hundred and two men.

The squadron reached Aubreville at 5:00 A. M., immediately came under shell fire and had two casualties from shrapnel. The enemy was firing on naval guns placed in Aubreville and, as the squadron advanced across the front of these guns, they received the benefit of the blast from one of their salvos; surely, an incongruity of modern war for the Navy to almost blow down the cavalry. The squadron experienced difficulty crossing the trench system, but advanced to Hill 290, where they remained until 4:30 P. M., when they moved forward to Cheppy. (See Sketch No. 3.)

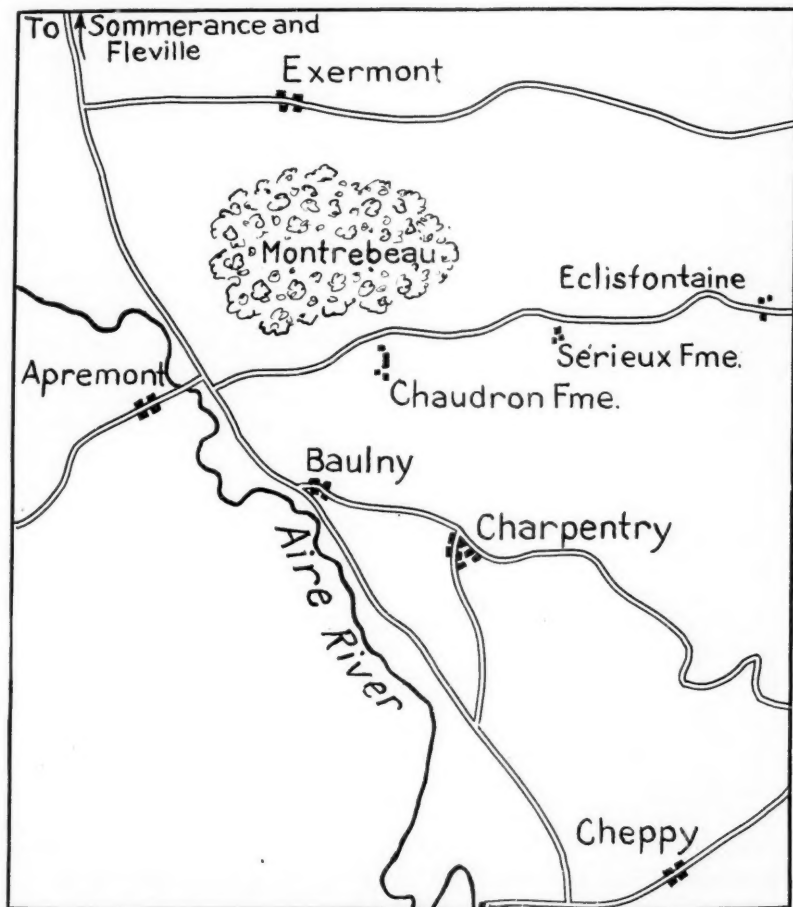
On the afternoon of September 27, patrols of one officer and eight enlisted men were sent to the front to determine the exact location of front lines and the disposition of units. This patrolling continued until the night of September 28-29. Information was gained by riding as far forward as possible and then dismounting and going the rest of the way to the front lines on foot. On the right flank a patrol of Troop B located an enemy battery and machine guns, which were finally silenced as a result of the information gained.

The advance was ordered continued, September 29. Troop B was given the mission of patrolling the right flank and maintaining liaison with the 91st Division. Troop F was to patrol the left flank and keep liaison with the 28th Division. Troop H was to cover the center of the line, maintain liaison and send back messages of the progress. Troop D was kept at Charpentry as reserve.

Troop F moved out into the Aire valley and, being spotted by hostile artillery, took cover under the steep slopes of the Aire river. As no movement of as large a body as a troop was possible under such observation, small patrols were sent out and one, reaching the outskirts of Apremont, sent back information that the 28th Division was attacking this town. An attempt was made to reconnoiter the left of the attacking line, but as it only drew artillery fire on the infantry reserves, the patrol fell back. Later the troop returned

to Baulny, having sustained casualties of three wounded and one gassed and having captured three prisoners near Apremont.

Troop H sent out patrols to the center of the line and sent back valuable



Sketch No. 3

information as to the location of troops from Montrebeau woods, where the fighting was heaviest.

Troop B's patrols covered the front from Sérieux Farm to Montrebeau woods. It remained out when the line was withdrawn to Baulny ridge and sent back information as to the location of the line.

During the fighting on September 30, the troops, realizing the futility of sending out a whole troop to reconnoiter in the face of such heavy fire, sent out small patrols from each of the four troops, maintained liaison with the

flank divisions and maintained contact and courier service with the front line. Lieutenant Burbank's patrol on the left flank kept liaison with the 28th Division. Near Apremont, the lieutenant and four men were wounded. Captain Taylor took patrols to the center of the line, sent back valuable information and was engaged in the fighting here. Patrols of Troop B maintained liaison on the right with the 91st Division, in addition to sending back information.

Troop D was detached on September 30 and performed military police duty with the V Army Corps. It was on this duty until November 4, when it was attached to the 89th Division to furnish mounted messengers.

In the action of September 27 to 30, the squadron had operated over terrain that was very rugged and badly shot up and through an elaborate trench system under hostile observation and fire on practically all its patrols. Many messengers were sent back and much valuable information. Patrols were at Apremont, Chaudron Farm, Montrebeau woods, Sérieux Farm and Eclisfontaine. Casualties were between twenty and twenty-five.

Upon the 1st Division relieving the 35th Division, the squadron (less Troop D) was attached to the 1st Division and used as liaison agents within the division. In the advance of the 1st Division on Sommerance and Fleville, patrols were sent out. A patrol from Troop B went to the edge of Sommerance, when it drew fire and performed courier duty along Sommerance ridge under heavy shell fire. One man of this patrol was captured, but later escaped to the infantry lines and gave information as to the enemy dispositions. A patrol from Troop H, under Captain Lambert, was subjected to heavy fire east of Sommerance and lost two men and twenty-one horses. A patrol from Troop F went to Fleville, where, coming under long range machine gun fire, it dismounted, reconnoitered to Sommerance, located the position of three machine guns and gave this information to the infantry.

On the night of October 16-17, the squadron (less Troop D) was withdrawn from the front and moved back to Rarencourt. The mounted effectives at this time were one hundred and fifty, due largely to the evacuation of sick and wounded animals. While with the 1st Division casualties were two wounded and fifteen gassed. The troops then marched back to Camp Mallery.

This concluded the joint action of the squadron and, as the conditions were not favorable to cavalry action nor were remounts available, the squadron was disbanded. Troop B went to St. Menehould on military police duty, Troop H to Fleury and Troop F to Avocourt, both on traffic control and picking up stragglers.

A detachment of one officer and fifteen men of Troop F were attached to the 1st Division in their final drive on Sedan, and its patrols operated south of Sedan.

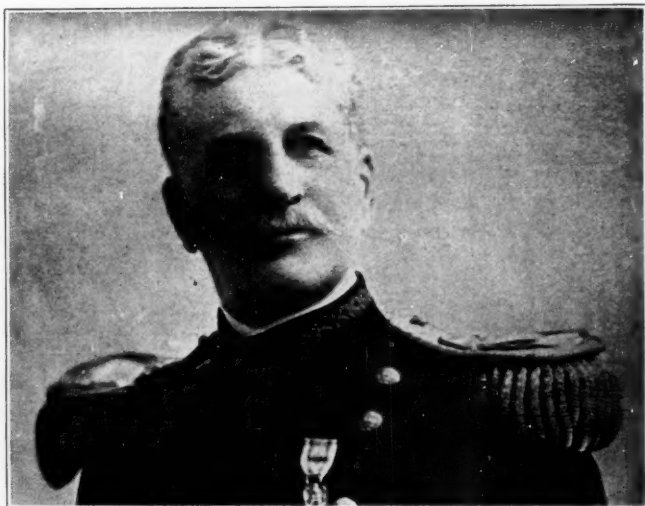
After the armistice, the various troops of the 2d Cavalry were scattered throughout France and Germany on various duties. On the march into Germany, the following troops acted as advance cavalry: Troop A with the 2d Division, Troop B with the 5th Marines, Troop C with the 32d Division, Troop D with the 64th Brigade during part of its advance into Luxemburg, Troop

I with the 2d Division and Troop M with the 3d Division in the final part of its march into Germany.

Summary

To briefly summarize the above, the 2d Cavalry arrived in France one year to the day after the declaration of war and was immediately scattered over France. From Brest to Valdehon, Epinal and Baccarat in the extreme east and from Fère-en-Tardenois in the north to Bordeaux in the south, with Gièvres in the center, there is a quadrilateral covering a large portion of France, in which the 2d Cavalry was stationed. Attached to divisions in sectors, actively participating in the Aisne-Marne, St. Mihiel and Meuse-Argonne operations, troops of the regiment were with the 1st, 2d, 3d, 26th, 35th, 42d, 77th, 80th and 89th divisions and were attached to practically every corps. While the time actually in combat was very small, troops were on the front and under fire for considerable periods. The work performed was largely military police and patrol duty while on the front, while in the S. O. S. it was largely remount work. In a war in which cavalry had few opportunities to operate, it is with pride that this regiment, badly scattered and under not any too favorable conditions, with young officers and a large percentage of recruits, performed their missions in a most creditable manner.

THE LATE BRIGADIER GENERAL WINFIELD SCOTT EDGERLY



General Edgerly's whole Service, prior to becoming a General Officer, was in the Cavalry. He served in the Indian Campaigns and was with the Seventh Cavalry at the Battle of the Little Big Horn

The Chain of Command

By COLONEL GEORGE WILLIAMS, *Cavalry*

Recently Commanding the Second U. S. Cavalry

PROBABLY the most remarkable fact about exercising command is that while most officers know it in theory, a good many fail to put the theory into practice properly. One reason for this is that peace-time organizations are so small that field officers have not much opportunity to actually command units suitable to their rank. Having spent many years of their service as troop commanders, they now use their spare time to interfere with the prerogatives of their own troop commanders. The latter, having small organizations, take over the duties of their lieutenants, sergeants and corporals. The young lieutenant, noting the manner in which his captain exercises command, continues the system when he is promoted, and so the vicious circle goes on.

Moreover, some field officers and many inspectors always seem to be favorably impressed with any officer who is active, even if his activity consists in taking over all the work himself, instead of seeing that most of it is properly done by the junior officers or non-commissioned officers.

Then war comes. Organizations are filled with untrained officers and non-commissioned officers. The fatal practice continues during the training period. When the organization gets into action, every officer from the colonel to the corporal finds that his own job is all he can attend to, and the result is chaos.

Lucky is the officer who at that late date puts into practice the chain of command, for he is saved, but at a tremendous cost both to his organization and to himself. He who does not see the light goes down in disgrace and is soon replaced. How can this sad result be avoided?

Even in the days of close-order fighting it was realized that direct control by one man could not be exercised over a group larger than from seven to eleven men. This resulted in the basic organization of the corporal and his squad. The corporal controls the men of his squad in barracks, at drill, on the march, in camp, and finally in battle. The only way to teach him to do this is to place responsibility squarely upon his shoulders from the moment he receives his stripes.

He should be held responsible for the personal cleanliness of the men of his squad, the condition of their arms, equipment and clothing, and for their training. If any member of his squad is found wanting in any particular, the corporal, not the private, should be held responsible. It will then be found, after the corporal has been called to task once or twice because some private in his squad has failed in some duty, that the corporal himself will correct the shortcomings of the private.

If the corporal reports to his platoon sergeant or lieutenant beforehand that a private does not know how to perform certain duties and that he has tried without success to instruct him, then the sergeant or lieutenant should

correct the matter, reporting to the captain, if necessary. The captain takes such action as circumstances may dictate.

This method of command will reduce court-martials and desertions, give the corporals confidence in themselves, and cause the men of the squad to look upon the corporals as their natural leaders in garrison and in battle.

One way to teach the corporal his responsibility in the care of government property is to have him list, under the name of each member of his squad, the arms, equipment and clothing which each man is "short" or which is unserviceable, the latter being marked with the letter "U." When property is issued, the corporal consolidates the articles needed to properly equip and clothe his squad, turns in the list with the unserviceable articles to his platoon sergeant, who, in turn, under the supervision of the platoon commander, consolidates the platoon lists and draws the required property from the troop supply sergeant. The platoon sergeant then issues the articles needed to each squad leader, who in turn issues them to the men of his squad. If any articles are not available for issue, the platoon commander decides on the distribution and determines which, if any, unserviceable articles can be retained in use.

The same squad list should contain the names of the squad in the order in which the corporal orders them to command, in case he has to leave the squad for any reason. While this is under the supervision of the platoon sergeant and the platoon commander, they should not change the order fixed by the corporal unless there is a very strong reason for doing so.

The list should be carried in a notebook, or on a card or a piece of paper, in the upper left-hand pocket of the coat or shirt. When the corporal leaves the squad for any reason, he turns the list over to the second in command, placing after his own name the letters "S. H." if sick in hospital, "S. Q." if sick in quarters, "F" if on furlough, etc. If the corporal is killed or wounded, it is the duty of the second in command to procure the list and place after the corporal's name the letter "K" if killed, and "W" if wounded, and carry on as corporal. However, if the second in command fails to procure the list, some other member of the squad should do so, and carry on. This will often bring to light a private who is worthy of promotion for his initiative.

In field exercises, officers and non-commissioned officers should require certain men to fall out, simulating those killed, wounded or missing. The corporal at once places the proper letter, "K," "W" or "M" after the man's name. This is of great assistance in checking up strength after combat. The corporal turns in a list of the absentees of his squad to the platoon sergeant, who consolidates it with the other squad lists, under the supervision of the platoon commander, who forwards the consolidated list to the troop commander, and so on.

Now consider a regiment, and follow the same system down. The colonel, assisted by his staff, inspects all activities of his regiment and assures himself that his policies relating to training, cleanliness and all other matters are being properly carried out. If he finds anything being done particularly well, he says so at the time, complimenting the officer, non-commissioned officer or

private responsible. If he finds anything wrong, he makes a note of it, without letting the party concerned see him do it. He then notifies the squadron, or separate troop commander, who in turn notifies the troop commander, and so on down through the chain of command until the responsible party is found, when the proper action is taken. Any intermediate commander also takes the necessary action on the way down. This method insures that each man believes that his immediate senior is observant. Each man will then naturally look up to his immediate commander as a leader. Under no circumstances should a major say to his captain, "the old man (meaning the colonel) found such and such things wrong in your troop today." If he does, it tends to indicate one or all of the four following things:

1. The major's standards are not as high as the colonel's.
2. The major's powers of observation are not as great as the colonel's.
3. The major is afraid to correct his captain, and so places the responsibility on the colonel.
4. The major does not agree with the colonel's policies, and wishes his juniors to know it.

The colonel is responsible for the general efficiency of his entire regiment, but he delegates the actual duties to his juniors. Thus, while in no way relieved of his responsibility, he assures himself that his policies are being carried out by being constantly on the drill ground and at field exercises, and by frequent inspections of barracks, kitchens, stables and other activities. As an instructor, he holds himself directly responsible for the proper instruction of his majors and his staff. The majors are responsible for their entire squadrons, but their direct control is through their captains, whom they instruct, and whose activities they constantly supervise and inspect. The captain instructs his platoon commanders and his mess, supply and stable sergeants, and holds them responsible for the proper carrying out of their functions.

Except in the instruction of commissioned personnel, the captain is assisted by his first sergeant. The lieutenant instructs the corporals and platoon sergeants, the sergeants assisting in the instruction of the corporals. The corporal instructs the men of his squad. The mess sergeant and the stable sergeant organize and instruct their enlisted assistants.

Certain objections to the above-described system may be visualized and met as follows:

1. Due to the number of men detailed away from a troop for detached service, special duty, and other reasons, it is impracticable to organize the troop into squads as outlined.

This condition can be met by organizing the men for duty with the troop and those detailed away from it into separate squads. This will necessitate frequent changing in the personnel of the squads, but as this condition exists to an even greater extent in war, due to battle losses and other causes, the troop is being prepared and trained for war in time of peace.

2. Due to stable police, kitchen police and other special duty within the troop, each squad turns out for drill and field exercises with one or more men absent, resulting in an unbalanced organization.

This condition can be met by having police of barracks and stables done by squads or half-squads, as is often done in camp. Thus one squad or half-squad will clean stables; another the grounds around barracks; and a third the halls, toilets, baths and porches of barracks, leaving undepleted the squads which turn out for duty.

3. In time of war, when many, if not all, of the non-commissioned officers are inexperienced, it is difficult to get the system started.

As a matter of fact, the sooner responsibility is placed upon a man, the sooner will his value or his inability to command be brought to light. If unfitted, he can quickly be replaced.

4. The method may seem slow, compared with direct control.

On the contrary, as soon as the system is in operation results come more rapidly, orders are transmitted faster, and confidence in all leaders is greatly increased.

THE LATE MAJOR GENERAL JOSEPH T. DICKMAN



At the Outbreak of the World War, General Dickman, a Life-time Cavalryman, was Commanding the Second Cavalry; at its close, he was Commanding an American Army. The Cavalry Service may well be proud of his illustrious career.

1st Cavalry Division Maneuvers

By MAJOR GEORGE DILLMAN, G. S. C.

A. C. of S., G-3, 1st Cav. Div.

FOLLOWING the 1923 maneuvers of the 1st Cavalry Division, which were held in the vicinity of Marfa, Texas, in the fall of that year, general plans for similar maneuvers were prepared and authority was requested, during succeeding years, for the division to again concentrate in the vicinity of Marfa for maneuvers, but not until 1927 was such authority granted.

As no funds were available for the renting of land on which to hold maneuvers, it was necessary first to determine if sufficient land and water could be secured for maneuver purposes during the latter part of September. It had been an unusually dry year in the vicinity of Marfa, grass and water were scarce and many ranchmen were not charitably disposed; however, due to the energetic cooperation of a few ranchmen, sufficient free land and water had been promised by August 15 for at least limited maneuvers, and on the assumption that this land and water would be available in September, detailed plans were undertaken.

The whole scheme of maneuvers was necessarily based on the location of available water, and it was necessary to make a detailed reconnaissance of the entire maneuver area, not only to fit the problems to the ground and the water, but also to determine what road and bridge work was necessary, to locate places for gates that probably would be needed, in addition to those already available, and to determine water capacities.

On August 24, a detachment of the 8th Engineer Battalion was sent by truck from Fort Bliss to the maneuver area to carry out the necessary work. The detachment repaired roads, bridges and water facilities, constructed additional gates, flagged all gates with white flags and prepared an additional maneuver map to the one used in 1923. The detachment returned to Fort Bliss September 1.

On July 30, a tentative supply and administrative plan was issued to the command and on August 20 general instructions for maneuvers were issued. These instructions included identification marks of opposing forces, neutral troops and umpires, umpire system and control, penalties, general rules for the operation of the observation squadron, reports, etc. On September 1 a terrain guide was issued which laid down rules for the use of ground and water within the maneuver area.

In order to provide orderlies and mounts for observers and visitors during the maneuvers, Troop E, 10th Cavalry, was ordered to accompany the division. This troop left Fort Huachuca, Arizona, August 22 and marched to Fort Bliss, a distance of 314 miles, arriving at the latter place September 6. It was attached to division special troops and accompanied the forward echelon of the division until its return to Fort Bliss, after which it returned to Fort

Huachuca, having marched over 1,000 miles, not counting the distance covered in the maneuver area.

Company C, 25th Infantry, temporarily increased to an enlisted strength of about 100, was transported by truck from Camp Harry J. Jones, Douglas, Arizona, to Fort Bliss. The movement started September 1 and was completed September 3, distance 223 miles. This company took over the post, thus releasing the maximum number of men of the division to attend the maneuvers. Upon the return of the division, the company was transported by truck to its proper station.

The 12th Observation Squadron, consisting of 6 planes, with 3 attack planes and 1 transport plane from Fort Crockett attached, was sent from Fort Sam Houston to Camp Marfa and was attached to the division for the period of the maneuvers.

Due to the location of certain ranches from which troops were excluded or through which passage of troops only was allowed, and also due to the wishes of certain ranchmen as to the use of their land and water, the maneuvers had to be controlled and limited to well-defined areas and to water facilities that could accommodate large bodies of troops.

All problems were prepared for a cavalry division, with an observation squadron attached. Shortly before the march began, information was received that the 1st Platoon, 2d Tank Company, would be moved by road from Fort Sam Houston to Camp Marfa to be attached to the division and that Battery A, 1st Field Artillery, would be provisionally organized as a portée battery, with guns in trucks and tractors on trailers, to be moved by road from Fort Sill to Camp Marfa for the maneuvers. Those organizations arrived at Camp Marfa, September 18.

March to Maneuver Area

The division, less one pack train, with Troop E, 10th Cavalry, attached, marched to the maneuver area between September 10 and 20.

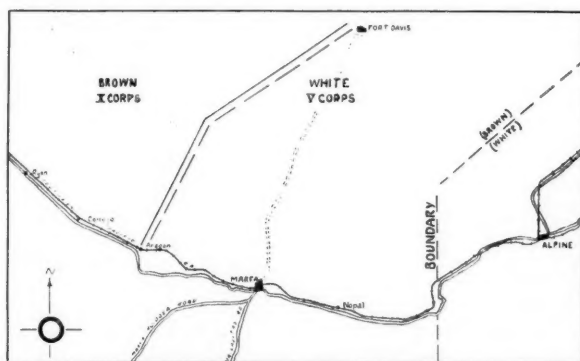
The march was arranged so that the White force for the two-sided maneuvers, consisting of the 1st Cavalry Brigade, reinforced by Battery B, 82d Field Artillery Battalion, Company A, 8th Engineer Battalion, and a detachment, 1st Medical Squadron, was concentrated at Camp Marfa, September 18, and the Brown force, consisting of the 2d Cavalry Brigade, reinforced by the 82d Field Artillery Battalion (less Battery B), Company B, 8th Engineer Battalion, and a detachment, 1st Medical Squadron, was concentrated at Valentine the same day. This arrangement gave brigade commanders an opportunity to have their entire commands together one full day before the maneuvers began.

The forward echelon, division headquarters, which acted as headquarters for the chief umpire and as corps headquarters for both the White and the Brown forces during the two-sided maneuvers, moved into the maneuver area between the opposing forces September 18. Troop E, 10th Cavalry, remained with the forward echelon during the entire maneuvers. The 12th Observation

Squadron, with attached planes, 1st Platoon, 2d Tank Company, and Battery A (portée), 1st Field Artillery, were used as corps troops and were attached to the White force or the Brown force during the two-sided maneuvers as the nature of the problems warranted.

The rear echelon, division headquarters, was motorized, post transportation being utilized, and camped with the forward echelon partly for instruction purposes and also in order to facilitate administration and supply.

The rear echelon, division headquarters, 27th Ordnance Company, bands and detachments not needed on maneuvers remained at Camp Marfa during the entire maneuvers. The 8th Engineer Battalion (less the two companies attached to brigades) and the 1st Medical Squadron (less the detachments



Sketch No. 1—General Map

attached to brigades) remained at Camp Marfa until September 22, then marched to the division camp on Alamito Creek.

General Plan for Maneuvers

On September 18 the following general and special situations were issued, each side receiving only the general situation and its own special situation: (See Sketch No. 1.)

1. *General Situation.* a. The county line which separates Brewster County from Presidio and Jeff Davis Counties is the boundary between a White State (east) and a Brown State (west). The White State has recently declared war against the Brown State.

b. A Red State (south of the Rio Grande) is neutral and it is not expected that it will enter the war as an ally of either belligerent State.

c. The V Corps (White) has invaded Brown territory and is in contact with the X Corps (Brown) along the general line Fort Davis—Aragon, where it has been stopped.

d. Reports of an impending Brown offensive directed toward Marfa—Alpine are in circulation.

2. *Special Situation (White).* The 1st Cavalry Brigade, with one battery, 82nd Field Artillery Battalion (horse), one company, 8th Engineer Battalion (mounted), and detachment, 1st Medical Squadron, attached, has been attached

to the V Corps and on the afternoon of September 18, 1927, has arrived at Marfa, Texas, and has gone into camp in rear of the infantry left flank, where it is awaiting further orders.

3. *Special Situation* (Brown). a. The 2d Cavalry Brigade, with 82d Field Artillery Battalion (horse), (less one battery), one company, 8th Engineer Battalion (mounted), and detachment, 1st Medical Squadron, attached, has been attached to the X Corps and on the afternoon of September 18, 1927, has arrived at Valentine, Texas.

b. On the afternoon of September 18, the Commanding General, 2d Cavalry Brigade, receives orders from the X Corps to proceed with his command on September 19 to Ryan, Texas, and there await further orders.

Umpires were assigned to each cavalry brigade, regiment, and rifle and machine gun squadron, and to the artillery battalion and each battery and to the engineer battalion of both the White and the Brown forces.

A meeting of all umpires was called at 10:00 A. M., September 19, at which the umpire system and control were discussed. Among other points the scheme for nightly camps during the two-sided maneuvers was announced, which was as follows:

Each afternoon, when the situations were furnished brigade commanders for the following day's problem, a copy of the situation and a tracing, showing camp sites and water available to the brigade, was furnished the assistant chief umpire with the brigade, and was given to the brigade commander only after the completion of the problem. In this way, brigade commanders could maneuver their respective brigades, according to the tactical situation, not knowing where they were to go for the night; at the same time assistant chief umpires could control movements so that troops would be in the vicinity of their camp sites at the completion of the problem.

On the afternoon of September 19, umpires joined the units and organizations to which attached.

The maps generally used during the maneuvers were as follows: Progressive Military Map of the United States, Marfa, Alpine and Shafter Sheets; Marfa Maneuver Area, First Cavalry Division, prepared in August, 1923; Texas Alamito Sheet, prepared in August, 1927, and Administrative Map, Marfa Maneuver Area, showing restricted areas. Scale of all three 1/125000. The sketches accompanying this article were prepared from these maps.

Reconnaissance and Counterreconnaissance

On the afternoon of September 19, the following situations were issued: (See sketch No. 2)

WHITE

Reliable information indicates that the Brown X Corps intends to extend its right flank south of the *Southern Pacific Railroad* and assume the offensive in the next few days, with the object of enveloping our left flank. A strong cavalry force, estimated as a reinforced brigade, reached Ryan today from the northwest.

The V Corps will assume the defensive pending the arrival of reinforcements.

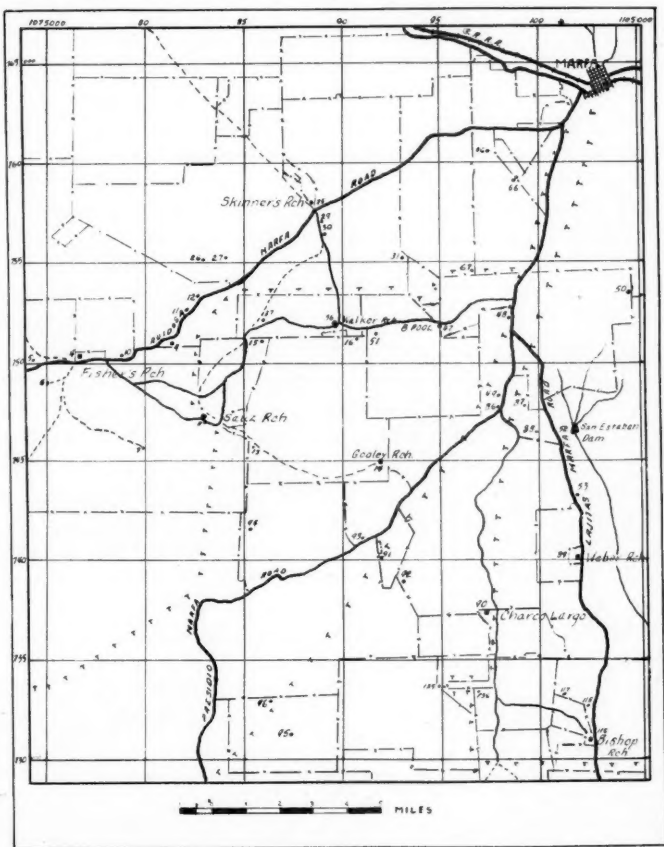
Send a reconnaissance squadron to Well 88 (*San Estaban Farm*) today, and, leaving its bivouac at that place at 8:00 A. M., tomorrow (September 20), have it reconnoiter to the *Ruidos, Marfa Road*, from Fisher (12) to Fisher (6), both inclusive. If the enemy cavalry be discovered advancing to the southeast, you will move the remainder of your command to 52 (*San Estaban Dam*) to cover the left flank of the V Corps from that vicinity. Contact once gained with the enemy will be maintained. Any attempt of the enemy to move east of

the *Presidio-Marfa Road* (South of *Thaxton Ranch*) will be immediately reported to this headquarters.

The V Corps Air Service will furnish reconnaissance missions over your front at 10:30 A. M., and 1:00 P. M., tomorrow. Radio missions you desire for these flights to Corps C. P. (*Skinner Ranch*) by 5:00 P. M., today.

BROWN

A strong force of enemy cavalry, estimated as a reinforced brigade, is reliably reported to have reached *Marfa* yesterday and is in bivouac at that place.



Sketch No. 2

The X Corps will extend its right flank south of the *Southern Pacific Railroad*, September 21, toward *Skinner Ranch*.

You will march your command at 7:00 A. M., tomorrow (September 20) via the *Ryan-Fisher (4) Road*, seize the wells in the vicinity of *Sauls Ranch* and cover the right flank of the Corps. You will prevent enemy reconnaissance west of the high ground along the general line: Southwest corner *Thaxton Ranch*—Well 94.

The X Corps Air Service will furnish reconnaissance missions over your front at 11:00 A. M., and 1:30 P. M., tomorrow. Send missions desired by you for these flights to Corps C. P. (*Skinner Ranch*) by 5:00 P. M., today.

It was intended by the problem for September 20 to illustrate, by the

operations of the White force, the use of a reconnaissance squadron moving forward to gain contact with an approaching enemy. The operations of the Brown force were to illustrate counterreconnaissance by the covering detachments of the brigade, i. e., by the advance guard on the march and by the outposts after the command halted.

The White reconnaissance squadron camped at Well 88 as ordered and at 8:00 A. M., sent out two officers' patrols of 8 men each, the squadron zone being divided into two sectors and one patrol assigned to each sector. The approach of the Brown column was discovered by one of the patrols at 9:45 A. M. A message to that effect did not reach the White brigade headquarters at Camp Marfa until 11:58 A. M., due to the fact that radio communication failed after 8:00 A. M., and motorcycle messenger had to be used. Acting on the information received, the White brigade was marched to San Estaban Dam, reaching there at 2:55 P. M. The reconnaissance squadron remained out during the afternoon and reconnoitered the Brown outpost position, in the vicinity of which several minor mounted attacks took place.

The Brown brigade, acting under its orders, started from Ryan at 7:00 A. M., and moved rapidly (about 6 miles per hour) via Fisher Ranch to Sauz. The first message from the advance guard commander on contact with the enemy was received by the brigade commander at 11:20 A. M. The command reached Sauz at 11:50 A. M., established outposts and went into bivouac.

On the afternoon of September 20, Battery A (portée), 1st Field Artillery, was sent from Camp Marfa to San Estaban Dam, where it was attached to the 1st Cavalry Brigade. On the same afternoon the 1st Platoon, 2d Tank Company, was sent to Sauz Ranch, where it was attached to the 2d Cavalry Brigade. Due to the nature of the roads and bridges, it was impossible for the platoon to join the brigade from the rear; therefore, it was sent as neutral troops on a road between the opposing forces. It moved by truck on the road to within about 6 miles of its destination, where the tanks were detrucked and moved under their own power across country to the brigade bivouac.

During the day the forward echelon, division headquarters, moved from Skinner Ranch to Well 86, where it would be in the vicinity of the following day's operations.

Attack and Defense

On the afternoon of September 20 the following situations were issued:

WHITE

Indications are increasing to the effect that the Brown X Corps intends to extend its right and assume the offensive within the next few days, with the object of enveloping our left flank. The hostile cavalry brigade, now bivouaced in the vicinity of *Sauz Ranch*, has the probable mission of covering the enemy right flank and operating against our left.

The V Corps plan remains unchanged. The 1st Infantry Division (White), having completed its concentration at *Lajitas*, has been ordered to extend our left flank and arrives at *Alamito* the afternoon of September 21. It will resume its march to the north the night of September 21-22, via the *Lajitas-Marfa Road*.

Move your command at 6:30 A. M., tomorrow (September 21) to the high ground just east of the *Presidio-Marfa Road* (2600 yards southeast of *Gooley Ranch*) to cover the *Lajitas-Marfa Road*, during its use by the 1st Infantry Division. In case of attack you will

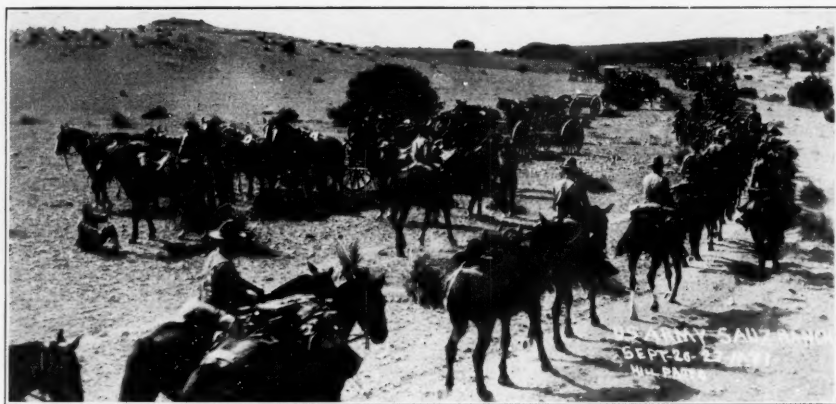
hold this high ground at all costs. Battery A (portée), 1st Field Artillery, is attached to your command and will come under your orders upon arrival in the vicinity of 52 (*San Estaban Dam*) at 3:00 P. M., today.

The V Corps Air Service will furnish reconnaissance missions over your front at 8:00 A. M., and 10:00 A. M., tomorrow. Send missions you desire for these flights to Corps C. P. (*Well 86*) by 7:00 P. M., tonight (September 20).

BROWN

It is reliably reported that an enemy force estimated as an infantry division with tractor artillery, which is marching northwest on the *Lajitas-Marfa Road*, will reach *Alamito* tomorrow afternoon (September 21) enroute to *Marfa*, to extend the enemy left. The cavalry brigade, which was in *Marfa*, moved south today and is reported in bivouac in the vicinity of 52 (*San Estaban Dam*). Our reinforcements reach *Brite* tonight.

You will advance from *Sauz Ranch* at 8:00 A. M., tomorrow, via the *Sauz Ranch (8)*—*Gooley Ranch (14)*—*Well 91*—*Charco Largo (90)* Road, attack and defeat any hostile cavalry encountered and be prepared to move to the south against the enemy infantry division



Cavalry and Artillery at Sauz Ranch

approaching *Alamito*. 1st Platoon, 2d Tank Company, is attached to your command and will come under your orders upon arrival at *Sauz Ranch* at 4:00 P. M., today.

Three attack planes will be at your disposal for operations tomorrow (September 21). Radio missions direct to the airdrome at *Marfa*. The X Corps Air Service will furnish reconnaissance missions over your front at 8:00 A. M., and 10:00 A. M., tomorrow. Send missions you desire for these flights to Corps C. P. (*Well 86*) by 7:00 P. M. tonight (September 20).

The object of this problem was to illustrate, on the part of the Whites, the taking up of a position in readiness (prepared to defend) and on the part of the Browns to attack. Portée artillery was assigned to the defending force as an experiment to determine its effectiveness for use with cavalry in the defense. Tanks and attack planes were assigned to the attacking force as an experiment to determine their effectiveness for use with cavalry in the attack.

The White brigade moved out at 6:30 A. M., toward the position it was ordered to hold; the brigade commander and staff, preceded by one troop as a screening force, moved to the position at a rate of 6 miles per hour. The remainder of the brigade followed at 5 miles per hour. The brigade commander arrived at the position at 7.43 A. M., made his reconnaissance and had completed written orders for its occupation when the enemy appeared in sight.

Through an error in recognizing the position to be held, the brigade halted and occupied a position about $1\frac{1}{2}$ miles to the northeast of the selected position. It being too late to occupy the position originally selected without fighting for it, the brigade commander directed that the position which had been occupied through error be held. The portée battery had no difficulty in getting into position to support the defense.

The Brown force marched from Sauz Ranch at 7:45 A. M., again moving rapidly. On reaching the vicinity of the Presido-Marfa Road, it came under fire of the White screening troop, which had fallen back to the next ridge to the northeast, but which was still about a mile in advance of the main position then occupied by the main White force. The Brown support squadron continued the advance until it came under heavy fire and was finally ruled out temporarily.

The Brown brigade commander, after a personal reconnaissance, ordered an attack enveloping the enemy left. The main attack was made by a regiment and a squadron; the pivot consisted of one cavalry squadron and a machine gun squadron, supported by the artillery. Due to the position of the tanks in rear of the column, they were unable to get up and take part in the attack. The attack planes were ordered to attack favorable targets at 8:00, 9:00 and 10:00 A. M. and were of material assistance to the attacking force.

At the conclusion of the problem the following messages were sent to:

WHITE

Our reinforcements delayed. 1st Infantry Division directed to halt at *Alamito* and await orders. Withdraw and bivouac in vicinity of *Charco Largo*. Further orders will reach you there. You will maintain contact with enemy cavalry.

BROWN

Enemy cavalry in your front appears to be withdrawing to vicinity of *Charco Largo*. Move your command into bivouac in vicinity of *Well 91*, and await further orders. Maintain contact with enemy cavalry. Any indication of further enemy withdrawal will be promptly reported to this headquarters.

Retirement and Pursuit

On the afternoon of September 21 the following situations were issued: (See Sketch No. 3.)

WHITE

Corps Air Service reports that strong Brown infantry reinforcements arrived in the vicinity of *Brite* last night. Reliable information indicates a Brown attack tomorrow to envelop our left flank. The hostile cavalry, after its attack today, is reported in bivouac in the vicinity of *Well 91*.

The concentration of the remainder of our I Corps in the vicinity of *Lajitas* is delayed. The V Corps will begin its retirement tonight by stages prepared to resume the offensive upon the arrival of reinforcements. First stage, night September 21-22, to the general line: *Fort Davis-Marfa*. The 1st Infantry Division now at *Alamito* retires to *San Jacinto Mountain* to cover the concentration and advance of the I Corps, clearing its present bivouac by 9:00 A. M. tomorrow. It is imperative that the Brown cavalry now in your front not interfere with the retirement of the 1st Infantry Division.

You will withdraw early tomorrow, via *Charco Largo*—136—*Bishop Ranch-Lajitas Road*, to the vicinity of *Alamito*, to cover the retirement of the 1st Infantry Division, holding the Brown cavalry north of *Alamito* until 12:00 noon tomorrow. Your rear covering force will not retire to the south of *Charco Largo* earlier than 8:00 A. M. Battery A. (portée), 1st Field Artillery, remains attached to your command for operations.

Three attack planes will be at your disposal for operations tomorrow. Radio missions direct to the airdrome at *Marfa*. The V Corps Air Service will reconnoiter over your front

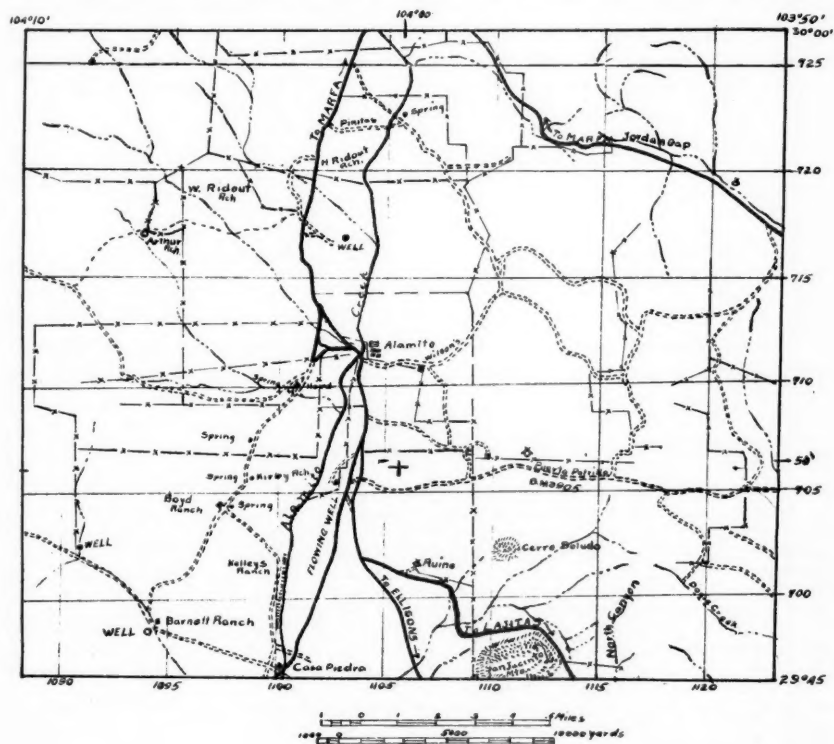
at 8:00 A. M. and 11:00 A. M. tomorrow. Send missions you desire for these flights to Corps C. P. (Well 86) by 7:00 P. M. tonight.

BROWN

Corps Air Service reports that the White infantry division, advancing from the southeast, is now going into bivouac at *Alamito*, after a long day's march. The hostile cavalry is reported bivouaced in the vicinity of *Charco Largo*.

The X Corps, reinforced, will attack at daylight tomorrow enveloping the enemy left.

Move your command at 8:00 A. M. tomorrow, via the Charco Largo-136-Bishop Ranch-Lajitas Road on Alamito, driving the enemy cavalry to the southeast and delaying the



Sketch No. 3

The Center of the Upper Edge of this Sketch joins approximately the Lower-Right hand corner of Sketch No. 2 on Page 51

advance of the enemy infantry division to the north. 1st Platoon, 2nd Tank Company, remains attached to your command for operations.

The X Corps Air Service will reconnoiter over your front at 8:45 A. M. and 11:30 A. M. tomorrow. Send missions you desire for these flights to Corps C. P. (Well 86) by 7:00 P. M. tonight.

The purpose of this problem was to illustrate the action of a cavalry force falling back through a pass, while protecting its rear from a pursuing cavalry force attempting to cut it off.

The White outpost, consisting of a cavalry squadron and a machine gun

troop, constituted the rear covering force. It was slow in joining the remainder of the rear guard and was attacked, near Charco Largo, about 8:30 A. M. on its left flank and rear by the Brown advance guard. The White rear guard defended successive positions through the pass and, upon approaching the Lajitas-Marfa road, had the support of the portée battery from a position on the road.

The Brown force took up a direct pursuit and numerous mounted attacks took place through the pass. The tanks in trucks, protected by a platoon of mounted engineers, were sent on the main roads north of the pass to operate against the right flank of the White force, but arrived too late to be effective.

At the conclusion of the problem the following messages were sent to:

WHITE

1st Infantry Division bivouacs tonight along *Lajitas Road*, south of *San Jacinto Mountain*. Move your command to bivouac at *Ruins* and well, just northeast of BM 3905, and protect the 1st Infantry Division against enemy cavalry interference from the north.

BROWN

Corps Air Service reports enemy infantry division withdrew from *Alamito* this morning and is now going into bivouac just south of *San Jacinto Mountain*. Cease pursuit and bivouac your command in the vicinity of *Alamito* tonight and there await further orders. Maintain contact with enemy cavalry.

During the day the forward echelon, division headquarters, moved from Well 86 to *Alamito*, where it remained during the remainder of the maneuvers.

Screening

On the afternoon of September 22 the following situations were issued:

WHITE

The hostile cavalry brigade is reported in bivouac in vicinity of *Alamito*.

The V Corps will hold its present position. The I Corps (less 1st Infantry Division) completes its secret concentration in the vicinity of *Lajitas* (about 30 miles S.E. of *San Jacinto Mountain*) tomorrow and will commence its advance on *Alamito* night September 23-24. The 1st Infantry Division has been ordered to move into position along the general line: *San Jacinto Mountain-La Viuda-BM 4125*, to cover the debouchment of the remainder of the I Corps through the *Tascotal-Bandera Pass* (10 miles S.E. of *San Jacinto Mountain*). It is important that this movement be kept secret.

Move your command at 7:00 A. M. tomorrow and establish a stationary screen along the general line: *Puerto Portrito Pass*—high ground about 1 mile N.E. of *Kelley's Ranch* and deny the enemy cavalry ground reconnaissance south of that line during the movement into position of the 1st Infantry Division tomorrow. Battery A (portée) 1st Field Artillery, remains attached to your command for operations.

The Corps Air Service will furnish reconnaissance missions over your front at 8:00 A. M. and 10:00 A. M. tomorrow. Radio missions you desire for these flights to Corps C. P. (*Alamito*) by 7:00 P. M. tonight.

BROWN

The X Corps Air Service reports the enemy infantry division, which withdrew from *Alamito* today, breaking up into groups and moving generally along the line: *Casa Piedra-San Jacinto Mountain* (2½ miles south of *Cerro Boludo*). The air service also observed great activity in the vicinity of *Lajitas* (about 30 miles S.E. of *San Jacinto Mountain*), which appears to be a secret concentration of troops of all arms. The hostile cavalry brigade in your front is reported in bivouac, just north and west of *Cerro Boludo*, with detachments covering its front and probably screening the movement of the infantry division. It is important that the movements and intentions of the enemy infantry force be determined. Move from your bivouac at 8:00 A. M. tomorrow and, by vigorous reconnaissance, determine the movements and dispositions of the enemy infantry division. Note: Patrols should not advance south of the line *Casa Piedra-San Jacinto Mountain*.

The Corps Air Service will furnish reconnaissance missions over your front at 8:00

A. M. and 10:00 A. M. tomorrow. Send missions you desire for these flights to Corps C. P. (*Alamito*) by 7:00 P. M. tonight.

The purpose of this problem was to illustrate the use of a stationary cavalry screen to prevent ground reconnaissance of troops in rear and the methods employed by opposing cavalry to penetrate the screen and obtain information.

The imaginary White infantry division was represented on the line: San Jacinto Mountain-Casa Piedra at two points. At those points, mounted posts were established with messages in their possession furnishing information to any Brown troops that reached either of the two posts.

The White brigade moved out at 7:00 A. M. to the line designated for the screen. The two regiments were assigned sectors, each observing on a front of 4 to 5 miles. The line was supported by the machine gun squadron, the portée battery and the horse battery, the latter being prepared to move from one position to another as required by the situation.

The Brown brigade moved from its bivouac at 8:00 A. M., under march orders issued the night before. The plan for piercing the screen was for the advance guard to develop the White position and one cavalry regiment to turn the left flank. After piercing the screen, three cavalry troops, specially detailed, were to get through and secure the desired information.

The advance guard met strong resistance near the Lajitas road. It developed the position and finally attacked, using the platoon of tanks in the attacking line. In the meantime, the regiment making the turning movement encountered White troops that had been concentrated to meet it. Up to the time the problem was concluded, the screen had not been penetrated in force. One patrol passed through the screen by stealth, reached Casa Piedra at 11:30 A. M. and brought back information of the White infantry division, which it received at that point.

After the completion of the problem, both brigades occupied the same bivouacs as the previous night.

Pursuit and Delaying Action

On the afternoon of September 23 the following situations were issued:

WHITE

The attack of the X Corps made no progress today. A hostile force estimated as a cavalry division, less a cavalry brigade, which left Ryan this morning, was observed going into bivouac at *Charco Largo* at 2:30 P. M. today. The hostile cavalry brigade in your front is reported in bivouac along east bank of *Alamito Creek*, just south of the *Lajitas Road* crossing.

The movement of our I Corps must be kept secret.

Concentrate your command at *Ruins* and, moving from that point at 8:00 A. M. tomorrow on *Alamito*, attack the enemy cavalry brigade wherever found and drive it north of *Alamito* to facilitate the advance of the I Corps. Battery A (Portée), 1st Field Artillery, and 1st Platoon, 2nd Tank Company, are attached to your command for this operation.

The V Corps Air Service will furnish reconnaissance missions over your front at 8:00 and 9:30 A. M. tomorrow. Radio missions desired by you for these flights to Corps C. P. (*Alamito*) by 7:00 P. M. tonight.

BROWN

The enemy held along the front of the X Corps today. Reports indicate that an enemy advance in force north of *San Jacinto Mountain* is imminent. Enemy infantry in trucks moved up just south of the hostile cavalry brigade bivouac at *Ruins* this afternoon.

The remainder of the 1st Cavalry Division reaches *Alamito* about 10:00 A. M. tomorrow,

at which time you will come under the orders of the division commander. It is imperative that your command does not become seriously engaged with the enemy prior to the arrival of the remainder of the 1st Cavalry Division.

Move your command at 7:30 A. M. tomorrow on the general line: high ground about $1\frac{1}{2}$ miles northeast of *Kelley's Ranch*—high ground about $1\frac{1}{4}$ miles north of *Ruins*, gain contact with and delay any advance of the hostile cavalry to the north, holding the enemy south of the ridge about 1 mile south of *Alamito* until 10:00 A. M. tomorrow.

The X Corps Air Service will furnish reconnaissance missions over your front at 7:30 A. M. and 9:30 A. M. tomorrow. Send missions desired by you for these flights to Corps C. P. (*Alamito*) by 7:00 P. M. tonight.

The object of this problem was to illustrate a delaying action and pursuit in open country.

The White brigade advanced from its bivouac at 8:00 A. M. The plan of action was to develop the Brown position in front with the advance guard and



A 7th Cavalry Bivouac on Outpost

to send one regiment from the main body along the Flowing Wells road to the west to attack the Brown right flank.

At 8:30 A. M. the White advance guard was stopped by the Browns in position and the White regiment was started toward its objective.

At 8:42 A. M. the remaining squadron of the main body was sent forward to reinforce the advance guard and the platoon of tanks was also sent forward. About 9:15 A. M., as the White attack had gotten well under way, the Brown force withdrew to its second delaying position about one mile in rear.

The Brown force moved out at 7:35 A. M. toward the position which had been selected for its first delaying position. The position had previously been divided into sectors. One regiment (less one troop) and one machine gun troop was assigned to the defense of each sector and ordered to hold until 9:00 A. M. The artillery supported both sectors. A reserve of two rifle troops, one company of engineers and one machine gun troop had its initial position about one mile in rear of the center. Before the White attack closed the Brown force withdrew to its second position.

After some minutes, the White attacking force again moved toward the second delaying position of the Browns. At 10:15 A. M., when the main White

force had fully deployed for its second attack and the White flanking force was about to launch its attack, the signal to stop the problem was given.

After the completion of the problem, both forces went into the division camp on Alamito Creek. The White force became part of the Brown force and the entire reinforced division operated from that time on as a Brown force, operating against an outlined White enemy.

September 25 being Sunday, the division remained in camp, where preparations were made to continue the problems as a division field exercise. In the morning a critique of the two-sided maneuvers was held, which was attended by all officers of the command. The Chief of Cavalry, the Commanding General, Eighth Corps Area, all umpires, observers and visitors were present.

Division Attack

The exercise for September 26 was based on the following situation:

BROWN

The hostile corps, which concentrated in the vicinity of *Lajitas*, advanced to the northwest last night and is reported in bivouac today in the vicinity of *Alamo Ranch* (20 miles southwest of *San Jacinto Mountain*).

You will advance tomorrow morning, attack the hostile cavalry brigade now in your front and be prepared to operate against the hostile infantry.

Based on the above situation, a written field order was issued for the march to Ruins.

The exercise of this day was to illustrate the mechanism of an attack by a full cavalry division with attached air service, portée artillery and tanks. The hostile White cavalry brigade was outlined by part of the 8th Engineer Battalion.

The division moved from camp as ordered and shortly before 8:00 A. M., its advance guard encountered the White advance guard.

The enemy took position squarely across the route of advance of the Brown advance guard, about 1½ miles north of the line: Kelley's Ranch—Ruins. A message of the contact was sent back promptly. The advance guard, having been stopped by superior numbers, deployed along the next ridge to the north and made a hasty reconnaissance of the enemy's position. In the meantime the division commander and his party galloped up to a ridge some half mile in rear of the one occupied by the advance guard. At that point at 8:25 A. M., a message was received giving the principal dispositions of the enemy. This was confirmed almost at once by a message from a reconnaissance plane and from the artillery observing officer with the advance guard.

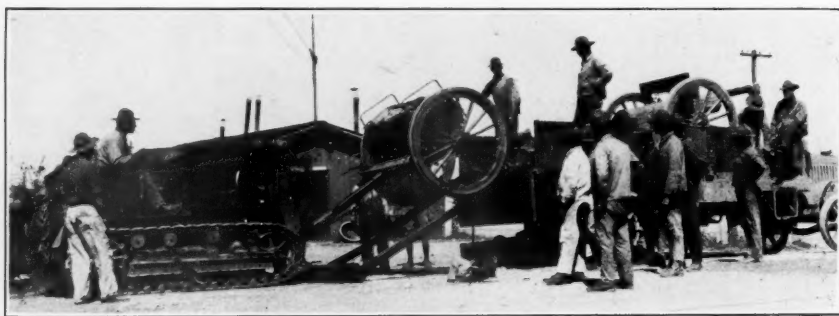
This being sufficient information upon which to develop the division, the division commander issued oral orders to his staff, commanders of the two right columns, artillery commander and liason officer from the left column for the development of the division for attack.

In the meantime the division G-2 had established an observation post on the ridge on which the advance guard was deployed. The division commander moved up to this observation post and made his personal reconnaissance. As the view from that point was particularly good, the division commander directed

that, when the unit commanders reported at his command post, they were to be sent forward to the observation post where he intended to issue his attack orders.

At 9:00 A. M., unit commanders having reported, the division G-2 explained the enemy situation, the division commander announced his decision to attack, enveloping the enemy's right, and an attack order was dictated to the assembled officers.

The situation was so arranged that a rather deliberate attack could be made. The enemy was made stationary, taking up a deployed defense, and the development and deployment of the division were more deliberate than would usually be the case, thus giving the tanks an opportunity to move up to the



Unloading Portee Artillery

assault position of the pivot and to furnish close support to the advancing dismounted line.

The attack was perfectly coordinated, all troops being in place when the rocket signal was fired by the 1st Brigade at 10:20 A. M. The 1st Brigade with the battery attached made its attack using a combination of dismounted and mounted action, the brigade less one regiment attacking dismounted and one regiment attacking mounted.

The rocket signal was fired by the regiment making the mounted attack and here arises the question as to whether this is the best method.

There is no question but that pyrotechnics are the best means of coordinating a cavalry attack and it would seem that the last unit to reach its assault position should be the proper one to fire the signal for the attack, provided, of course, that it could be foreseen which unit would be last to reach its assault position. In the case of the attack described above, the regiment firing the rocket signal launched its mounted attack immediately and the attack was under way before full fire support was received from the dismounted attack of the brigade and from the artillery. If the mounted attack is launched too soon, there is a chance of its being stopped by an enemy which is not under heavy fire. Therefore, it would seem that the mounted attack should be delayed a sufficient time

to insure that the maximum supporting fire is placed upon the enemy before the mounted attack is launched.

Division Defense

The problem for September 27 was based on the following situation:

BROWN

The hostile I Corps reaches the western end of the *Toscatal-Bandera Pass* early tomorrow morning at which time, it is reliably reported, the covering force (1st Infantry Division) will begin its advance to the north.

The 27th Infantry Division, moving by motor truck and marching, will relieve you by noon tomorrow. Seize and hold the high ground along the general line: *Kelley's Ranch-Puerto-Porilla Pass* until relieved by 27th Division.

Based on the above situation, a written field order, for the defense, was issued.

This problem was to illustrate the taking up of a defensive position by a complete cavalry division with the idea of its being taken over by an infantry division. All installations and all means of communication were set up, after which the division commander and staff made an inspection of the position and officers were given an opportunity to get a general idea of the set-up.

End of Maneuvers

The original plan for the last two days was to have the entire division march to Camp Marfa under a tactical situation, making a night bivouac at San Estaban Dam. Camp sites and supplies had been arranged but due to the wishes of the ranch owners on which the proposed camp sites were located, it was not possible to use the camp sites selected, and as there were no others that would accommodate the entire division, the march to Camp Marfa was made under the following situation:

BROWN

The enemy is in general retirement. The hostile V Corps withdrew during the night September 26-27 to the general line: *Nopal-Fort Davis*.

This Corps resumes its attack at daylight tomorrow.

Move your command, less one brigade, tomorrow morning to *Camp Marfa, Texas*, in Corps Reserve, sending one troop of cavalry by motor truck accompanied by Battery A (portée) 1st Field Artillery, and 1st Platoon, 2nd Tank Co., to *Camp Marfa* this afternoon prepared to operate on our left flank. The remaining brigade to follow September 29.

Based on the above situation, a division march order was issued and the division marched to Camp Marfa.

Although there was only one available road and that was very muddy, little difficulty was experienced. The column composed of the cavalry troop in trucks, the platoon of tanks and the portée battery cleared Alamito at 1:30 P. M. and, after traveling over flooded roads, at times using its tractors to pull vehicles out of mud holes, reached Camp Marfa, a distance of about 32 miles, by 7:30 P. M.

On the afternoon of September 29, a critique on the division field exercises was held. In addition to the critique proper, the Commanding General, Eighth Corps Area, and the Chief of Cavalry both addressed the assembled officers and an observer sent from the Chemical Warfare School gave a talk on chemical

warfare in connection with the maneuvers and the possible cases he had observed where chemicals could have been successfully used in connection with the problems.

A review of the division was held October 1 on a large open elevation about 3 miles north of Camp Marfa. The setting was ideal and the troops were at their best. The division commander reviewed the troops and pronounced the review perfect in every detail.

The division then returned to its permanent stations.

Supply

The division exercised general supply control from the time troops left their respective stations until their return thereto, exercising direct supply



Headquarters Troop, 7th Cavalry, Watering at Sauz Ranch

control for the Fort Bliss units throughout that period and direct control for all troops during the period the division was concentrated in the maneuver area, all supply agencies of the division being used, augmented by the 49th Motor Transport Company and the 81st Motor Repair Section.

Supply services were established at Marfa, which was the railhead throughout the maneuvers. During the two-sided maneuvers, the two opposing forces were required to select and report daily distributing points and the divisional supply services placed supplies at such points in accordance with stated requirements. Each force was also required to select and report daily collecting stations for men and animals, which were evacuated at the 1st Medical Squadron to Camp Marfa.

During the division field exercises near Alamito the division established distributing points from which brigades and separate units drew their supplies. During this phase the Division Quartermaster Train and the 49th Motor Transport Company were required to transport supplies a distance of about 36 miles from railhead to distributing points. The use of animal drawn trains exclusively under this situation would have been impossible. With the present authorized trains of a cavalry division the radius of action is only eight

miles. To afford the cavalry division maximum mobility it is apparent that some motor cargo vehicles must be available.

Tanks

The employment of the 1st Platoon, 2nd Tank Company, clearly demonstrated the following:

1. That the tanks, in supporting the attacks of the pivot of maneuver, were able to cross the rough open terrain, including dry arroyas, traversed by the cavalry, but at a speed of only about 3 miles per hour.

2. That tanks of the type furnished the division, while effective when able to give direct support to the pivot of maneuver, are too slow to move from their place in the marching column, detruck and move into assault position prior to the launching of the attack. This is especially true when cavalry is operating against cavalry.

3. That tanks, as used in the maneuvers, could not be employed with the maneuvering force.

4. While the type of tank used in the maneuvers has not sufficient speed to be effectively employed with cavalry, it is believed from the results obtained, that a tank with a road speed of 18 miles per hour and able to move across country at a speed of 12 miles per hour on its own traction, will be a valuable adjunct to the cavalry.

Portée Artillery

The use of Battery A (portée), 1st Field Artillery, demonstrated the following:

1. That portée artillery, due to the time required for detrucking and moving into position, has limited use in the cavalry division.

2. That this type of artillery could be used with the pivot of maneuver, but was too slow for attachment with the maneuvering force for direct support in an enveloping attack.

3. That portée artillery could not replace horse artillery in the cavalry division, due to its lack of mobility.

4. That portée artillery, if made more mobile than the unit employed, offers promise of being a valuable asset to the cavalry corps.

Motor Transportation

Upon the arrival of the division in the maneuver area, thirteen Class B 3-ton trucks were made available to carry out tests. Some of the trucks were obtained from the Camp Marfa pool and some were sent from Fort Sam Houston.

On September 21, these trucks had been equipped as horse carriers and reported to the 1st Cavalry Brigade for experimental transportation of a cavalry troop as a raiding party. The ramps, made of 2" x 12" pine boards, fastened together with three overlapping pieces of 2" x 6", were very unstable, and loading conditions were very bad. The carriers had been improvised hurriedly and side boards spaced from 6" to 12" apart. The tail gates of trucks were used in conjunction with tail boards to close the truck after loading, and ramps were doubled so as to make them the full width of the trucks. Side rails were not used on ramps and no special care was used in loading. After 4 hours and 30 minutes, 38 horses with complete full pack equipment, with the

exception of rifles, were loaded on the trucks and transported a distance of 24 miles after which they were detrucked and ridden 8 miles.

In spite of the poorly constructed carriers, the methods employed in loading and the condition of the roads, it was evident that cavalry could be transported on improvised Class B 3-ton trucks to advantage without impairing their efficiency as cavalry immediately after unloading.

After tests in the 1st Cavalry Brigade, the trucks were turned over to the 2nd Cavalry Brigade, where they were altered and made more safe for the horses and men. Eight trucks were completed with material at hand and turned over to Troop C, 8th Cavalry, for use on the morning of September 27 in the problem of that day. The trucks were well bedded with gravel,



Unloading a Tank

manure and hay, and spotted on a convenient embankment. Loading started before daylight (5:45 A. M.) and trucks cleared the camp at 7:00 A. M. The actual loading was finished in 50 minutes and most of the horses were loaded without any difficulty. They were transported 7 miles and at the termination of the problem returned to camp, where they were watered and fed grain on the trucks and then transported to Camp Marfa. The trucks were pulled out of bad places in the road by other trucks and tractors; worse road conditions could not have been encountered anywhere. The animals, men and equipment were transported about 40 miles and were on the trucks from 5:45 A. M. until 8:00 P. M., over 14 hours. Notwithstanding this, the animals were in good condition when unloaded and could have taken the field for an additional 20 hours that night. The injuries to the horses were due mostly to the construction of the carriers, of a minor nature and preventable. The trucks were assembled at Camp Marfa and 4 carriers were transferred to trucks of the 49th Motor Transport Company for use by troops enroute to Fort Bliss.

During the maneuvers the trucks, in addition to the above, were also tested as field and combat trains.

As a result of the tests conducted, it was concluded:

1. That the transportation of cavalry in trucks (with 6 men and 6 horses

with equipment in same truck) is feasible, the size of the command to be transported being limited only by the number of suitably equipped trucks available at the station for that purpose.

2. That movement of mounted men with their mounts and equipment in separate trucks is not as practicable as the method employed above.

3. That the substitution of cargo trucks of the type used in tests (Class B 3-ton) as field and combat trains for animal drawn vehicles is not practicable for cavalry.

4. That the movement of cavalry in trucks appears practicable for distances of 40 miles or more, provided properly equipped trucks are readily available at the station.

5. That under exceptional circumstances it may be practicable to move cavalry in trucks for distances between 20 and 40 miles, if the troops can be loaded without delay and if the physical condition of the animals must be safeguarded for employment at the termination of the truck movement.

6. That the means of converting trucks, as used in the experiments, can be simplified and improved.

Air Corps

The attached air service functioned in an excellent manner. At times some difficulty was experienced in getting desired reconnaissance missions to the airdrome at Marfa, especially when the division was in the vicinity of Alamito, more than 30 miles away. However, in most cases, reconnaissance planes were able to carry out the desired missions at the times specified.

More difficulty was experienced in the use of attack planes, as in most cases attack missions had to be foreseen and arrangements made so as to have the attack planes flying in the vicinity of their probable objectives at stated times.

General

Needless to say, the experience in the field was of the utmost value to all who took part in the maneuvers. The steady improvement in the efficiency of the division exemplifies the importance of following garrison training by frequent divisional maneuvers.

Many errors were made, but it was observed from day to day that these errors, especially by small units, in most cases were not repeated, showing that valuable lessons were learned and corrective measures promptly taken by the individuals and units concerned.



2d Cavalry Brigade in Camp

Portée Cavalry

Movement by Motor of Troop F, Fifth Cavalry, from Marfa, Texas, to Fort Clark, Texas

By CAPTAIN CHARLES CRAMER, *Fifth Cavalry*

IT should be of interest to all cavalry officers and also to our brother officers of the other branches of the service to learn that we can move cavalry (horses, men and equipment) by motor transportation as far in a day as infantry can be moved in that time by the same mode of transportation, and still be ready to move out, mounted, in an hour or two after unloading.

I was detailed to return my troop to Fort Clark, a distance of approximately two hundred and eighty-eight miles, in trucks upon the completion of the First Cavalry Division maneuvers.

The troop consisted of two officers, forty-five enlisted men and forty-eight horses, with full field equipment. Twelve Liberty trucks were made available and utilized as follows:

1. One motorcycle for troop commander.
2. Eight trucks for horses (six horses per truck) with equipment of riders and three enlisted men on each (equipment carried on the partially lowered tailgate of truck).
3. One truck for hay.
4. One truck for extra equipment and baggage and for men that did not ride on the trucks with the horses.
5. One truck for rations and baggage.
6. One tanker, used for refueling on road.
7. One truck for spare wheels, etc., for trucks, and oats (not shown in photograph).
8. One G. M. C. truck for officer in charge of trucks (not shown in photograph).

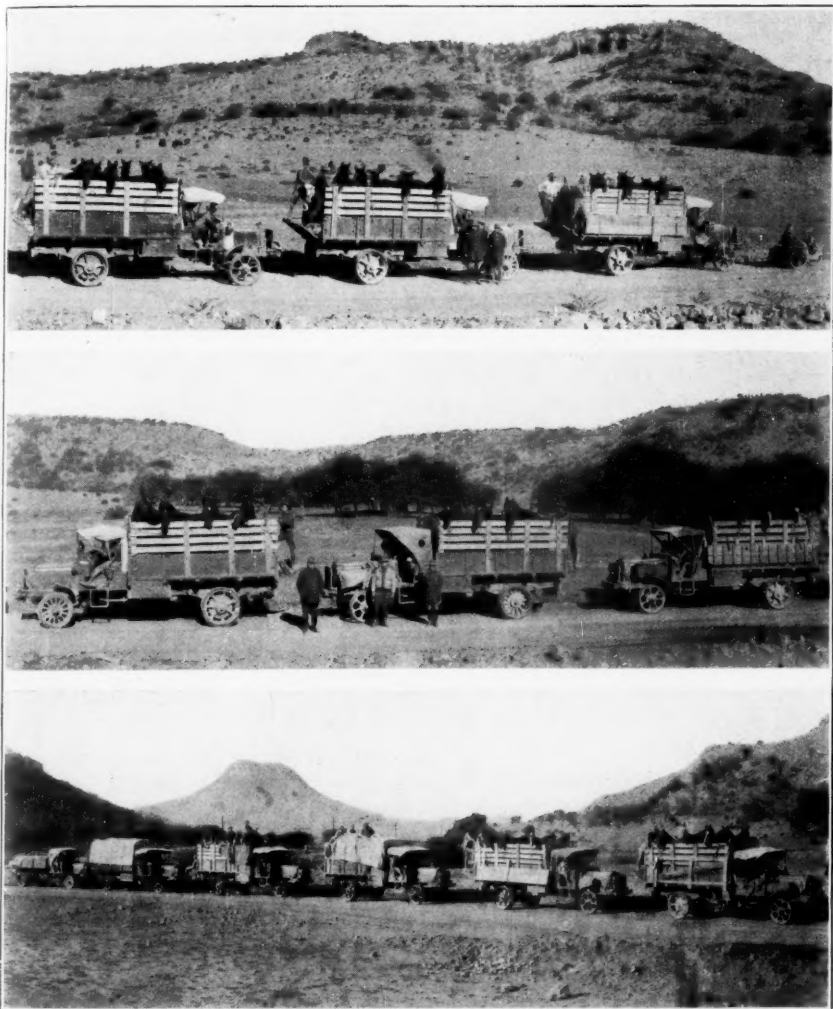
The bed of each truck was fitted with a frame to keep the horses from falling out. These frames were made of 2" x 6" material, and were constructed by the division engineers, under the supervision of Major Mason, Division Veterinarian. They were made high enough so that the average horse could keep his head comfortably out over the side of the truck and still not be able to jump out. The openings in the frame were spaced so that a horse could not get a foot through. Two sets of loading ramps were made of 2" and 2½" material. Side rails were furnished with one set. The ramps were carried on the sides of two trucks, fastened by chains or large iron hooks. The one set of side rails was fastened to the side of a truck with a rope.

The trucks were received about 10:00 A. M., October 2, and the top rails of the frames were rounded by rasping so that sharp edges would not rub or injure the horses' necks or lower jaws. This was better than padding the rail.

Cinders were not obtainable for the floors, so about one and one-half inches of good gravel, with a small amount of sweepings from the picket line, was

put in each truck to make good footing for the horses. This answered the purpose very well.

The troop started loading horses at the end of the troop picket line at 5:30



The Troop Halted on the Road

A. M., October 3, putting six horses in a truck and placing them head and tail, the same as when loading in railroad stock cars. All horses were loaded in one hour and eleven minutes, the first truck being loaded in five minutes and

the last in twenty minutes. The other six took from six to nine minutes each to load. Two sets of ramps were used, loading two trucks at a time. Only one ramp had side rails, which are very essential and make the loading easier and quicker.

The delay in loading the last truck was due to the fact that most of this time was consumed in trying to load an officer's private mount, which we did not wish to risk injuring by forcing him into the truck.

The truck train got under way from Camp Marfa at 6:45 A. M., and arrived at Lozier Canyon at 9:00 P. M., a distance of approximately one hundred and sixty miles. Horses were all unloaded in twenty-two minutes. They were watered, fed hay and, after twenty minutes, were fed grain; all ate very well.

Horses were carefully inspected and nine were found to have abrasions, over half of which were rubbed tails—nothing serious enough to prevent them from being saddled and ridden out.

Condition of roads over the route for the day was excellent, weather fair and cool. The horses rode well, were calm and did not cause one bit of trouble or delay. The only delay was the refueling of trucks about every forty miles, which takes from twenty to thirty minutes.

On October 4, horses were fed grain at 3:30 A. M., and watered at 4:30 A. M. Loading commenced at 4:40 A. M., and was completed at 5:38 A. M. (fifty-eight minutes), loading two trucks at a time.

We moved out from Lozier Canyon at 5:45 A. M., and arrived at Fort Clark at 6:50 P. M., a distance of approximately one hundred and twenty-eight miles. Two of the horse trucks were delayed about one hour on account of broken gas lines and did not arrive in camp until an hour later. One of these trucks carried one set of our ramps, so we could only unload one truck at a time. Horses were unloaded in twenty-five minutes and the same procedure as on the previous day was followed as to water and feed.

The road between Lozier Canyon and the Pecos River was very rough, with many short steep hills, causing the horses to be tossed around considerably and bruising them to some extent. One truck had to be unloaded three times on account of one of the horses getting down. Twenty minutes was lost each time in getting him up and the truck on the way again. After crossing the Pecos River the roads were very good into Fort Clark.

The head of the train reached Devil's River at 2:00 P. M., and halted until the rest of the train caught up and the tanker arrived. Horses were watered from buckets; men had lunch; trucks were refueled and the train was on the way again at 3:30 P. M.



Perfectly Contented

At the time of unloading at Fort Clark, the horses showed signs of what might be called "auto intoxication," by staggering and walking stiff-legged for the first few yards, this being the result of bracing themselves while in the trucks, but it is believed that, after three or four hours' rest, all horses could have been saddled and a twenty-mile march made without any difficulty.

The entire trip was made in thirty-six hours. Of this, eight hours were spent in camp at Lozier Canyon the night of October 3-4, leaving twenty-eight hours actual running time to cover the two hundred and eighty-eight miles, or an average of about ten miles per hour, including stops for refueling and other purposes.

The next morning, October 5, all horses were carefully inspected by the veterinarian and the troop commander and the following noted:

- 13—rubbed tails.
- 5—bruised knees.
- 5—skinned and rubbed buttocks (these were all large horses).
- 4—skinned hips.
- 2—bruised sides.
- 1—skinned hocks.

The veterinarian, Captain Rogers, concurred with me that all horses that were fit for duty when leaving Marfa, Texas, were at this time ready to take the field. A number of horses had bruises from stepping on each other or from kicks, which were not any more than would have occurred if they had been shipped by rail. The large additional number of abrasions noted on the second day, over the number on the first day, was due to the rough roads between Lozier Canyon and the Pecos River. The other officer, Second Lieutenant Charles H. Valentine, and all the enlisted men were very much interested and all worked hard to make the trip a success. Also Captain Shelby Newman, the officer in charge of the trucks, and his drivers worked hard and late each day and all deserve much credit in making this experiment a success.

The following recommendations were made in submitting the report on this trip:

1. That all ramps be made stronger and of lighter material, and that all ramps have side rails or, if side rails are not available, then the ramp must be the same width as the truck.
2. The frame work on the truck must be made more substantial, especially the front and rear ends, to keep the sides from spreading, as a great deal of trouble was experienced in keeping the rear end from spreading; all had to be roped.
3. Provisions must be made so that the end horses, front and rear, will not have their sides bruised or skinned from rubbing. This can probably be best taken care of by using a blanket and surcingle on the end horses.

The Cavalry—Air Corps Team

By MAJOR H. H. ARNOLD, *Air Corps*

Commanding the 16th Observation Squadron at the Cavalry School

FOR years prior to the time when aircraft became a practical arm of the service, military leaders had thought of, and searched for, some other means than those available for securing information—something with which they could deliver a blow to the forces of their opponent, located in areas beyond their most advanced lines. They wanted something in addition to their cavalry, infantry and artillery. All manner of devices were tried out in the search. Observation posts were elevated as much as possible on trees and high hills and tall wooden towers were constructed, but the want was not satisfied.

The balloon had scarcely made its appearance before the French were trying it out in battle. This lighter-than-air craft was used more or less successfully in the battle of Fleurus in 1794. Apparently the results obtained from its use justified further trials, for these large gas bags were sent up in many of the later battles of the same period.

Napoleon evidently thought that the balloon was not the last word in military aircraft, for he granted permission to one of his officers for the construction of a mechanically driven airship, as his Grand Army approached Moscow in 1812. He was seeking something by which he might penetrate the fog of uncertainty which always surrounds a battlefield. This airship was not a success and so the world's greatest general never learned what advantages might be derived from aircraft during battle.

In our own military history aerial reconnaissance was first attempted in the Civil War, when General McClellan used a balloon during his Peninsular Campaign. He must have found it worth while, for he sent that balloon up during practically every battle from Yorktown to Gaines' Mills. General Fitz John Porter evidently thought that he could secure results by using the balloon that he could get in no other way, for he personally made over a hundred ascensions during the battle of Yorktown. On one occasion the balloon broke loose and General Porter was carried over the enemies' lines, but fortunately the wind shifted and brought him back to the rear of his own lines where the balloon landed. From the meager reports available, it appears that information of great value was secured by the passengers of this balloon during its various trips.

Aircraft developed so rapidly under the stimulus of the World War that the armistice was signed before the full worth of aerial vehicles was realized. The necessity for an Air Service-Artillery team was fully realized before that war started. The advantages of an Infantry-Air Service team were just beginning to be realized when the war ended. The Cavalry-Air Service team was never fully developed. So little was known concerning the scope of activities of aircraft at the beginning of the war that the co-operation between aircraft and other arms came as a result of necessity. Thus the air service

was working almost continuously with the artillery and infantry, but the opportunities for a Cavalry-Air Service team became fewer and fewer as the war progressed. In only one theatre of war was the cavalry given a real insight into the many varied activities of the air service; that was during General Allenby's Palestine campaign.

With the elimination of all controversial ideas and theories, it is apparent that a close relationship must exist between the cavalry and the air corps. Each must understand the powers and limitations of the other, for both will be pushed to the limit of their powers at the outbreak of war. This mutual understanding must be consummated in time of peace, for it is too late to acquire it after war has been declared. Each has its own missions to perform and neither can entirely eliminate the other from the picture, but their field of activities greatly overlap.

Large cavalry commands find their horses greatly fatigued after a period



Smoke Screen Laid from the Air Through Which Mounted Cavalry can Attack the Hill on the Left with Small Losses

of two weeks or a month, during which daily marches of thirty or more miles have been made. Cavalry scouting parties can cover the immediate front of an advancing army to a limited extent only. Beyond that they can not secure information. The limit may be imposed by distance or the presence of the enemy in large bodies. The area which the cavalry does cover will be searched most thoroughly, but there is a limit to the endurance of both horses and men; accordingly the necessity for an auxiliary service.

With aircraft an entirely different condition exists. Thirty miles is less than a half hour's flight. Heavily occupied areas which stop the advance of ground troops can be flown over or around. The distance, which an airplane can go beyond our front lines, is limited only by the amount of gasoline that the plane can carry or by the aerial resistance encountered. Well-trained pilots and observers can secure details concerning the movement of troops on the ground which are almost unbelievable. Cameras make pictures of objects which escape the human eye or which, if obtained, may be forgotten during a long patrol on the ground or in the air.

Aircraft can be the cavalry's best friend or its most dangerous enemy. A successful attack upon the bunched led horses of a cavalry command will transform a mounted force into sorry looking foot soldiers in a remarkably short space of time. The effect upon the general plan of operations of such an occurrence needs no further discussion. Then again an aerial attack down the column of a marching cavalry force will disperse that column so that it will take hours for reassembling. Horses must be exceptionally well trained to remain in the vicinity after a few bombs have exploded nearby.

The Cavalry-Air Corps team must function and function well to prevent such occurrences as those outlined in the preceding paragraph. During the peace-time training periods, the horses must be trained to hear, but not heed, the peculiar whine and the terrific roar of the diving plane. The troopers must be trained to see at a distance and recognize the planes as friendly or hostile.



This Formation Presents a Profitable Target from the Air

Air scouts must be able to quickly discover low flying attack planes and instantaneously give warning of their approach.

Unit commanders must know the proper formations to assume to minimize the probabilities of their units being observed by the planes. They must also know the formations which will make the targets presented so dispersed that the planes will not attack. If the attack is made, certain formations will insure fewer casualties than others. Certain things, whether they be in the open or under cover, attract the eyes of the aviators and must be eliminated as far as possible. At times there are conditions existing on the ground which make it impossible for aviators to see mounted men, even though they be out in the open.

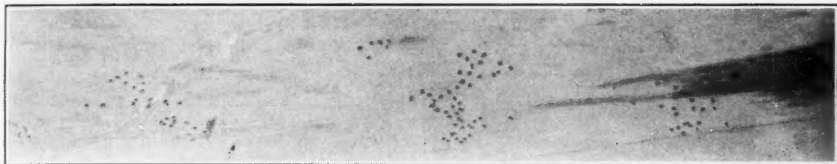
Troops can be made to realize these conditions only by the air corps and cavalry working hand in hand during their training. No unit commander can definitely assume that a certain type of foliage will completely conceal his command until he has tried it out against the overhead eyes. How many cavalry unit commanders know whether it is the shine from the polished brass on the horse equipment, or the smooth saddle seat, which betrays the presence of the mounted men to the aviators several miles away?

Cavalry to perform its proper function and be of value, must not be unduly delayed en route to its objective. How can it keep moving if airplanes make intermittent attacks against all the concentrated units in the column?

However, there are formations which will permit the cavalry to continue its march in spite of the planes and these formations will permit the different subdivision commanders to retain absolute control of their units. These formations can be assumed very rapidly and provide a very poor target for the attacking airplanes.

The average air corps officer knows little or nothing of cavalry formations, tactics or organization. These officers unfortunately have very little opportunity of securing such information. In order to give maximum service to the cavalry, it is most important that the officers of an air corps organization, working with the cavalry, understand something of what the cavalry does and how it does it. This holds equally true for the observation pilots, who are part of the Cavalry-Air Corps team, and for the attack personnel, who will be called upon to delay or annihilate enemy cavalry.

The first mission of the Cavalry-Air Corps team is to work together in time of peace and determine and prove certain fundamentals, which are essential



This Formation Presents an Unprofitable Target from the Air

to successful operations in time of war. These fundamentals can not be learned without actual contact between the two arms. They are not all learned at once nor do they come by intuition. Some of them are developments from experiments which at first glance appear to be entirely unrelated. Intimate contact, close association, mutual understanding are essential to the proper working of the team and they can not be obtained in two or three days.

The cavalry and air corps have been working together at Fort Riley for several years. The value of close association was demonstrated during field exercises recently held by the Second Cavalry. The 16th Observation Squadron was operating three entirely different types of planes during the exercises. All of the DH and the Douglas O2C airplanes were enemy aircraft. The Douglas O2 was friendly. There is very little difference between these planes; and between the O2 and the O2C the casual observer finds it rather hard to distinguish one from the other, when they are in the air. However, during these exercises the troopers almost instantaneously took cover upon the approach of a hostile plane. Yet when an O2 came into sight, the panels were displayed and lines marked even before the Verry pistols were fired. The enlisted men learned the slight difference between the types of planes by studying the profiles. The Cavalry-Air Corps team had been developed as a result of long hard work and the results obtained amply repaid the efforts expended.

There are four separate and distinct types of planes, which may come into contact with cavalry commands: pursuit, observation, attack and bombard-

ment. However, the two types which will probably be most closely associated with the cavalry are observation and attack. Accordingly, every cavalryman should know intimately the performances of these two types and also something of the others.

The necessity for an observation squadron being part of a cavalry division has been recognized and provided for in the latest tables of organization. Observation aviation is used, as its name implies, for reconnaissance, liaison, contact and photography. It can, if used to its fullest capacity, be of utmost value to a cavalry command.

Observation planes are normally two seater biplanes. They have a speed of from 125 to 135 miles an hour, but their cruising speed is close to 100 or



Latest Type Douglas O-2C Army Observation Plane

110 miles an hour. These planes can stay in the air for periods of five to seven hours. They carry a synchronized gun, which shoots through the propeller straight to the front, and two flexible guns, which are fired from the rear cockpit. Normally observation planes operate from altitudes between 2,000 and 5,000 feet. However, they can climb to altitudes of from 10,000 to 15,000 feet with a full load. Photographs are usually taken from the higher altitude.

Some of the missions required of these planes are; close reconnaissance of fortified areas, location and disposition of forces in strongly held positions, distant missions beyond the enemy lines, contact missions with our own troops, photographic flights, and command missions. A cavalry command might require any or all of these missions from its accompanying air service.

On a command mission, a staff officer will normally be sent out to secure some particularly desirable information. The tendency to use staff officers for this purpose will increase rather than decrease. It should not be expected that any officer, on his first flight, will be able to return with an intelligent report. The first two or three flights are far from being pleasant to the average officer. Accordingly, all staff officers, as a part of their peace time

training, should be required to make many extensive flights and to actually secure data of military importance while on the flights. The ten-hour aerial experience course, as laid down by the War Department, provides an excellent means for developing staff officers who can accomplish satisfactory command missions.

Attack aviation is a new development. So far it has not reached a stage where exact principles can be laid down with regard to performance of planes. The method of using attack planes, however, has been definitely decided upon. The planes approach the targets at a very low altitude, deliver a surprise attack with machine guns and bombs and get away as quickly as possible. By flying very low the element of surprise is almost certain to be obtained,



Latest Type Curtis Army Pursuit Plane

when operating against partially trained troops. In the attack the planes fly so low that they barely miss the tree tops, skim along just clearing the ridges and swoop down into the valleys. Their presence is first known to the personnel attacked when the planes thunder into sight from beyond a tree or over a ridge.

Attack planes are a very powerful weapon, as they carry both machine guns and bombs. The number of guns available for shooting to the front vary from two to six. In addition there are two guns mounted in the rear cockpit for firing over the sides of the fusilage. Each plane can carry ten fragmentation bombs, weighing 18 or 25 pounds apiece. These bombs have an effective range on exploding of about 60 feet. They are specially designed for use against troops.

While attack planes will seldom be attached to a cavalry command, they will probably be used quite often against cavalry. Accordingly the armament, method of attack, possible damage inflicted and performance of the planes should be the subjects of continued study by cavalry personnel. In fact, cavalry personnel should know almost as much about attack aviation, for

self-preservation, as they do about observation aviation, for securing information for further operations.

There are many cases when it is possible for attack aviation to be of great assistance to cavalry. For instance, if during an advance the cavalry is held up by a machine gun nest, or other point of resistance, too strong to be overcome, the assignment of attack aviation will undoubtedly be greatly appreciated. Then again, during a withdrawal, if the pursuit becomes too persistent, an attack by airplanes upon the main body of the pursuing force would provide a welcome relief. It might also happen that our cavalry was pursuing a retreating enemy. Imagine the assistance to be obtained from attack aviation throwing the retreating columns into disorder, blocking the roads ahead of the troops with overturned trucks, wagons or guns, blowing up bridges ahead of them, or even causing the retreating forces to deploy and thus slowing up the retreat.

Normally pursuit aviation comes into contact with ground troops very little. The planes ordinarily operate at very high altitudes and can scarcely be seen from the ground. Their missions are to protect the observation, bombardment and attack planes from hostile attacks, drive away enemy planes from attacking our troops and, generally speaking, to clear the air of hostile aircraft. Pursuit planes are single seaters with a high speed of close to 170 miles an hour. They climb rapidly and are very maneuverable. Before and during combat they may dive at their objective until the planes attain a speed of almost 300 miles an hour. The high speed and extreme maneuverability of pursuit planes provide the greatest menace to planes of other types.

Bombing planes may be of some assistance to cavalry, but their operations will be so remote from the ground troops that the effect of their endeavors will probably never be fully appreciated. Bombardment aviation is a weapon of destruction. It is used against targets of great importance where the bombs will cause considerable damage. Ammunition dumps, depots, factories, railroad yards, ships, docks and concentration camps are typical targets for bombardment aviation. These planes carry from two to four thousands pounds of bombs. The bombs vary in size from 300 to 4,000 pounds each, depending upon the target against which used. Bombardment organizations will probably never form a part of, or be attached to, a cavalry command.

From the foregoing it is seen that the Cavalry-Air Corps team will probably be made up of Observation Aviation and such cavalry units as it may serve with.

The Cavalry-Air Corps team is a strong combination and as important as any team in the army. Their work interlocks and intertwines to such an extent that no exact line of demarkation can be drawn separating their fields of reconnaissance. Their functions will overlap from time to time. Accordingly, it is of the utmost importance that they work in harmony and synchronize their efforts. It is essential that they get together in times of peace to secure the maximum efficiency in time of war. The cavalryman understands his horse and the airman understands his mechanical bird, but each must know at least the fundamental principles of how the other uses his steed.

National Guard Training

By CAPTAIN KRAMER THOMAS, *Cavalry*

Instructor, Idaho National Guard Cavalry

THE National Guard system, eminently advantageous economically and socially as a substitute for a large standing army, has certain inherent difficulties which must be accepted as part of the price of its expediency. The successful training of the Guard is accomplished in the degree to which these innate obstacles are overcome.

Outstandingly, the greatest handicap under which the Guard must work is the shortage of training time. One drill of one and one-half hours per week and a two weeks' field training period per year are the allowance of time in which the Guard is expected to make itself ready to fulfill its mission. It requires nothing more to demonstrate the value of each hour, nor to prove that any training method must have as an integral part of its purpose the most drastic economy of time. "Time-efficiency" must be the frame-work of all training plans. This is a problem peculiar to the Guard alone, and its solution must come from the Guard. Outside of a not too analogous experience in training the war army, the regular service has no back-ground from which it can lend assistance or give advice. The problem is further complicated by the large annual turn-over (around 30%) in the enlisted personnel, which in effect acts to further circumscribe training time.

Training results, then, are largely the reflection of the principle of time-efficiency. Since the reorganization following the war this idea has come to be accepted as a truism by the Guard and, under the whip of necessity, some remarkable results have been accomplished, and modifications of training ideas are in process of development which will be of tremendous value.

There are two directions in which the search for the solution of the training problem may lead. The Guard may be restricted to elementary training as a first objective with a view to thoroughly grounding it in basic training, and only advanced to a higher objective when tests have shown the first objective to be reached. This is the present policy of the Militia Bureau, and under present conditions is conservative and sound. Or the training may be carried, less thoroughly as to detail, over a broader (and for the troops, a more interesting) field. Each plan has its good and bad points, and each requires a degree of supplemental, post-mobilization training before the organizations are ready for use.

It is my belief that the second method, the plan of covering more varied and more advanced subjects, is conducive to more actual progress than the first, as it facilitates the maintainance of enthusiasm and study; but it is a dangerous system in the hands of an inexperienced leader, and is difficult to keep under supervised control. In following the first, or intensive method, the Guard for the present must forego the advantages of the second, but I believe

that the troops are slowly working forward, within the limitations of the Militia Bureau training doctrine, to a point where it will be possible to extend the scope of training so as to derive the obvious benefits to be gained from extensive training. This progress is due to self-taught, imperically acquired methods of training which are, in turn, the results of the study of time economy. The training of the Guard can advance only as it finds new, or better, methods of learning more in a given time.

Many of these newly learned methods of training are still in the experimental stage, others do more harm than good, but a few have emerged from the laboratory of practical test, which are becoming recognized as thoroughly sound. Among these I consider the following as most important:

1. As the selection of officers and noncommissioned officers goes on, more and more care must be given to seeing that the replacements are above average intelligence, still in the habit of study, and sufficiently nimble-witted to be able to reason deductively from a principle to a given case. The Guard must be trained by its officers, and they in turn must be taught in the very limited time they can spare from their private lives, in addition to what time they give to work with the troops. Naturally, the more the leaders can learn in the limited time available for their instruction, the more they can impart to troops. Long strides can be made by the Guard in this direction, not because the officer and noncommissioned officer personnel is not good (it is excellent), but because the peculiarities of Guard service place a premium on the leader who is quick to learn.

2. Tactical instruction should be increasingly applicatory, the exercises being prefaced by a terse explanation of the principle involved, followed immediately by a demonstration. Besides its native merit, this is a method of instruction to which the men are accustomed; it is the way they are taught their work in civil life. Wordy lectures on tactics to men who have come to drill after a day in an office or factory result in nothing but putting the listeners to sleep.

3. Extra training time should be encouraged by every means possible. Saturday afternoons, holidays, and other spare time, can be efficiently utilized for exercises, field meets and the like. These extra hours can be made popular with the men and, after a reasonable degree of proficiency is reached in the regular drills in horsemanship, they go far toward increasing the riding efficiency of the command.

4. Every cavalry unit should have a suitable place to ride, the year through. Fundamental as this fact is, there are many northern troops who are dismounted all winter for want of riding halls. This is a tremendous waste of training time, as an entirely disproportionate number of drills must be put in on dismounted work. Providing riding halls is a state function, but many Guard cavalry organizations are taking the initiative in this matter, raising funds and building their own halls.

I have said that there are also many ideas still in process of development whose aim is to more efficiently utilize training time. These will require more time for testing before they can be pronounced good. I only mention the following by way of illustration:

In training the noncommissioned officers and the junior officers in the more common forms of tactical employment (advance guard, patrolling, etc.)

a "normal" formation, action and solution, is taught, the student being made to understand that this normal can be modified to suit the circumstances. This is a great time saver, as it immediately gives the student something tangible to grasp. He is then, at the very beginning of the instruction, ready to go ahead with interesting applicatory exercises. Although this method has had but little testing, I have observed that fewer mistakes are made in the applicatory exercises when taught by this method, either through applying the "normal" where a modification should be used, or in using an erroneous modification, than under the system where the principle alone is taught and perfection comes only from solving a multitude of problems, a method too prodigal of time for efficient use with the junior officers and noncommissioned officers of the Guard.

The Guard has had seven years since the post-war reorganization. During that time it has had to study and analyze its problems and begin their solution. It is significant that so thoroughly decentralized an organization, with so little opportunity for exchange of training ideas, should find most of its units arriving at about the same conclusions as to how the training problems should be met. And it is a very considerable achievement for the Guard to have advanced to its present satisfactory condition.

At present, the Guard cavalry is limited to troop objectives in training. The training of squadron and higher headquarters is being done away from the units. With the Guard over the whole country realizing that the key to success lies in a proper understanding of time-efficiency, it is not unreasonable to suppose that many units will soon be passing tests which will move them on to squadron and regimental objectives, permitting the headquarters and staffs to train directly with their troops. When that state is reached, the Guard cavalry will be ready for service just as soon after mobilization as the remounts it will require to fill its complement of horses are ready for use.



Field Artillery With Cavalry

By MAJOR EDMUND L. GRUBER, *Field Artillery*

Recently Artillery Instructor at the Cavalry School

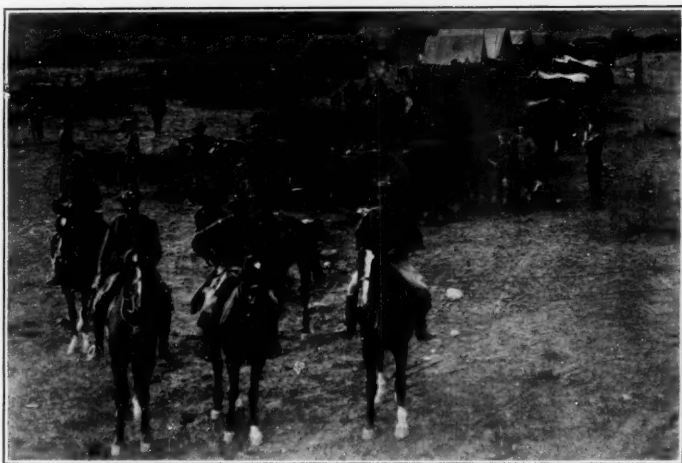
DURING the World War, we gained considerable experience in employing field artillery with infantry, but when it comes to field artillery supporting cavalry, our experiences are very remote. Frequent mention is made of the Infantry-Field Artillery team. But how infrequently do we hear any one speak of the Cavalry-Field Artillery team? And yet, these two branches have always felt a sympathy for each other, a sympathy due, no doubt, to their common comrade, the horse. Few of us realize that our field artillery has had no experience in typical cavalry operations since the Civil War. In our Indian Wars, in which the cavalry rendered such valiant service, no field artillery was engaged. In the Spanish and Philippine Wars, our cavalry unfortunately was separated from its horses and fought on foot. During the Punitive Expedition in Mexico, the field artillery did a lot of marching but I doubt whether it fired a single round with hostile intent. And in the World War, many cavalry units fought as field artillery, and made good field artillery at that.

It is, therefore, not at all surprising to find a general impression existing today, that the employment of field artillery with cavalry is practically the same as that with infantry. Such, however, has not been the experience of the principal belligerents in the World War, nor is this sameness to be inferred from our Field Service Regulations.

If we carefully study our FSR and the important cavalry operations during the World War, we shall find that success can be attained when the important characteristics of cavalry are fully exploited and the employment of the field artillery is adapted thereto. The outstanding characteristic of cavalry, wherein it differs from infantry, is its mobility. The more restricted this mobility, the nearer will cavalry combat approach that of infantry. When cavalry is separated from its horses or transport, it becomes infantry in fact if not in name and adopts the combat methods of the latter. This mobility endows cavalry with the ability to carry out certain combat actions which it would be difficult for infantry to execute. For example, cavalry can move by bounds, quickly transport its fire power to a critical locality, operate at a considerable distance from the main forces and often by surprise, and operate on an extended front with wide intervals between its combat groups.

Now, all of these militate against centralized control of field artillery, so desirable if we want to get concentration and maximum effect of artillery fire. Such centralized control is usually possible when supporting the slower moving combat action of infantry. The field artillery then has sufficient time to reconnoiter its positions, to select good observation points, and to establish its indispensable communications net. All of these facilitate centralized control and, therefore, concentration of fire. On the other hand, the nature of cavalry

combat and the wide front on which cavalry operates make it difficult and frequently impossible to attain this. However, our FSR also accept the principle of decentralized control of field artillery, and clearly indicate the situations where centralized control must go by the board and the principle of decentralized control applied by higher commanders. This should be done when the situation is still obscure and must be cleared up by reconnaissance and security detachments; when visibility of terrain is poor and observation is restricted; when there is not sufficient time for organizing a suitable com-



**Part of 82d Field Artillery Battalion (Horse) in 1st Cavalry
Division Maneuvers**

munications service; when the command is greatly extended; or when the battle breaks up in a series of separate combats.

When we analyze these situations, we find that they all have special application to conditions that will confront field artillery when operating with cavalry. Cavalry is our principal agency for ground reconnaissance and security. Due to its mobility, it operates on a wide front, particularly in a delaying action. Its combat frequently moves so rapidly that there is no time for laying any telephone lines. The air service can not tell us what lies hidden in close or broken terrain. Such terrain must usually be cleared up by the cavalry. When the pursuit of a defeated enemy begins and the action breaks up into a series of separate combats, the first agency a commander thinks of is his cavalry. When we speak of typical cavalry missions, our mind pictures its reconnoitering, covering, delaying and pursuing missions. All of these require a certain amount of decentralization in control of field artillery; in the pursuit our FSR calls for a "wide decentralization." In typical cavalry operations it is, therefore, incorrect to keep the field artillery under

centralized control and resist decentralization. The art comes in knowing when and how to decentralize.

All of these things show how important it is for all cavalry commanders, certainly down as far as troop commanders, to understand the employment of smaller artillery units. If they do not, we will have the same fiasco that attended the use of the accompanying gun with the infantry during the war. In the next war, any cavalry lieutenant in the service today may roll out of his bunk some morning and find a 75 mm. gun or platoon assigned to his command. Instead of looking on it as an encumbrance, he should be thankful that he has at his disposal a powerful means for carrying out his mission. Unless he understands how to use it, he may find that he has a white elephant on his hands. He should know enough about field artillery to understand its characteristics, fire power and mobility; appreciate its limitations and the difficulties that confront the field artilleryman; assign it appropriate missions; take advantage of its support to exploit his own mobility; cooperate with his field artillery to insure a successful outcome of combat; and be able to disable any captured artillery that cannot be dragged off.

The forward displacement of artillery in a cavalry column is usually very easy because cavalry can march on both sides of the road, leaving the middle of the road free for wheeled and motor transport. If this is not done habitually in a cavalry command, then orders must be issued permitting the artillery to pass on one side. On a march averaging 25 miles a day, horse artillery can keep up with cavalry, day in and out, when the rate of march does not exceed $4\frac{1}{2}$ miles an hour. For a single day's march, it can maintain a rate of 5 to $5\frac{1}{2}$ miles an hour; for short distances up to 7 miles an hour. A forced march of 50 to 60 miles has been frequently made by batteries. Such a march is made, not by increasing the rate of march, but by increasing the duration of the march. Portée artillery can maintain a rate of 8 to 10 miles an hour on good roads and cover a distance of 100 miles in a day's march.

All cavalry commanders must remember that timely arrival of artillery does not necessarily mean prompt opening of accurate fire. The former depends upon the mobility of the horse or motor transport, which we know. The latter depends upon the mental alertness, not of one but of several men, which factor we do not know. Very often delay in opening fire is due not so much to a suspected mental inertia of the artillery commander as it is to lack of foresight of cavalry and infantry commanders. The latter often forget all about their artillery, or fail to give proper and timely instructions so that their supporting artillery commander can look one or two jumps ahead.

The preparation of fire does not take much time, because every good field artilleryman can apply short cuts appropriate to the situation so that his battery will be able to open fire as soon as it is in position. But a proper understanding of the mission, the reconnaissance for position, the transmission of orders, and the establishment of communication, all these take time and foresight. Avoidable delays affecting these preliminary measures are usually the cause of delay in opening effective fire. Before a cavalry commander com-

plains of the failure of his artillery to give him a timely and effective support, he should quiz himself on the following points:

1. Have I kept my artillery commander constantly informed of the situation from start to finish?
2. Have I given him an opportunity to make a reconnaissance and consulted him before formulating my plan of action?
3. Have I kept him informed of my intentions so that he can think one or two steps ahead?
4. Does he know the mission of the command, my plan of action and the scheme of maneuver and location of the supported troops?
5. Have I given him a mission which will make the most effective use of the artillery?

If cavalry commanders will consider these questions, I am sure they will never have any regret for having depended upon their artillery for support. The more effective that support is, the more complete will be the success of the cavalry.

The orders of a cavalry commander to his attached artillery should assign a definite support mission conforming to his scheme of maneuver, indicate the general location from which this mission is to be executed, see that the road is cleared for the artillery to reach its position, say when fire is to be opened, and prescribe the liaison to be established.

All the details of execution should be left to the artillery commander. All the cavalry commander need do after that, is to keep his artillery commander informed of what is happening and what he intends to do, and to see that his artillery has reasonable protection. Let us see how these things would be done by taking up a few situations involving the use of small artillery units with cavalry in different situations.

Reconnaissance

A reconnaissance detachment composed of Troop A, with a machine gun platoon, an armored car section, a 75 mm. gun section, two motorcyclists and a radio set attached, is given a distant reconnaissance mission. Before moving out the captain of Troop A should inform his artillery commander of the mission of the detachment, his plan of action, the march formation of the detachment, the place where he expects to gain contact with the enemy, the degree of readiness in which the artillery should march, and where the commander will march.

The detachment would probably move out in the following march formation:

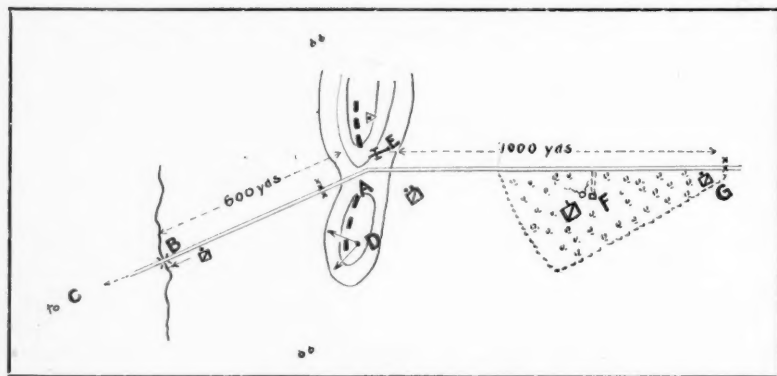
Advance guard: Point: Armored car section with one motorcyclist, preceding the advance guard by bounds to each successive terrain line or to a line of exploration one to three miles distant. *Support:* One platoon of cavalry, with a machine rifle squad attached, preceding the detachment by about one-half mile.

Main body: The rest of the detachment with the 75 mm. gun near the

tail, but followed at several hundred yards by a squad as a rear point; or the 75 mm. gun section may march between the two platoons of the main body.

Since a reconnaissance detachment is more or less isolated, it is apt to receive a surprise attack on its rear at any time. The 75 mm. gun section should, therefore, not be left trailing the column, but should be secured in the column. The march depth of the detachment will vary between $1\frac{1}{2}$ and 3 miles, depending upon the size of the bound made by the advance guard and its armored car point.

Let us assume that about one-half hour before arriving at A (See Sketch No. 1), the first hostile patrols are encountered. The captain decides to halt at A in order to make his periodic radio report to the division and to await the results of reconnaissance by his patrols and armored cars, which have ad-



Sketch No. 1

vanced in the direction of C. Being in hostile territory, the detachment would have to provide for its security while resting. The captain's order would probably be as follows:

"We halt here for one hour to await results of our reconnaissance in the direction of C.

"The support will establish a march outpost at A, barricading the road against motor traffic. It will send forward a squad with machine rifles to cover the crossing at B, and patrols to cover our flanks.

"The machine gun platoon, in position on that knoll at D, will cover the barricades and provide anti-aircraft protection.

"The 75 mm. gun section will go into position north of the road near E, prepared to open fire on any hostile column or armored cars advancing from C.

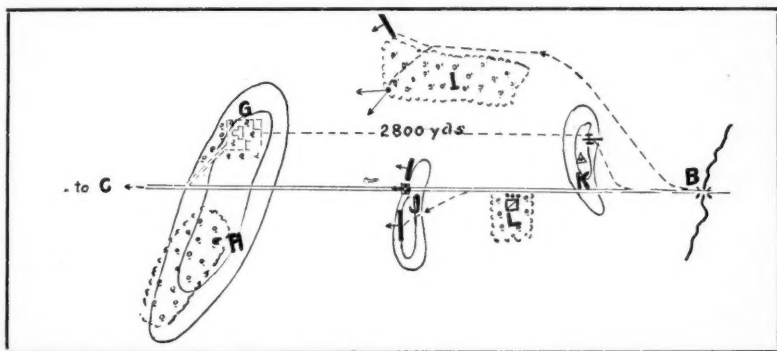
"The rest of the detachment will take cover in the woods at F, where the radio will be set up. One squad will barricade the road at G and protect our rear.

"Led horses in the woods at F.

"I shall be at the house at F."

Here we have an example of the employment of a single gun in a situation that will frequently confront cavalry under present day conditions. With every "flivver" a potential armored car, simply by mounting a piece of boiler plate in front of the hood and a machine gun on the front seat, every cavalry unit must take measures to prevent surprise and to protect itself on

the march and at a halt. The 75 mm. gun is the weapon to use for defense against armored cars and to interdict the advance of any hostile column. It should be emplaced near the road with less than dismantled defilade (allowing the enemy to be seen through the sights) so that it can, with direct laying, bring an enfilade fire to bear on any armored cars or hostile columns before they reach the crossing at B, and continue this fire up to the barricade. It should also be so emplaced that it can be swung around and bring fire to bear on the barricade and road to the rear. The most favorable place for the emplacement of the gun would be at a bend in the road. It should be laid on a straight-away stretch of the road in the direction of the enemy, at a range of about 2,500 yards. All preparations are made to fire a volley of six rounds on a point of the road that must be traversed by the enemy. If



Sketch No. 2

the hostile armored car succeeds in passing through this barrage, the range is shortened by 500 yards or more to the next favorable point where the volley is repeated, and so on. With an enfilade fire down the road, a direct hit should be obtained with six rounds at ranges under 2,000 yards.

After halting at A for one-half hour, the captain received information that his armored cars and patrols received considerable hostile rifle and machine gun fire from the ridge G-H, as they approached C, but were unable to determine the strength of the hostile force (See Sketch No. 2). In order to clear up the situation, the captain decides to advance via B and make a reconnaissance in force. When the head of the advance guard reaches K, he issues the following order:

"We attack the enemy on the ridge G-H, enveloping his left.

"The advance guard will secure the ridge at J, advance astride the road and attack the enemy in front.

"The 2d Platoon, with machine gun platoon attached, will advance under cover to the woods at I and attack in the direction of C, enveloping the enemy's left flank.

"The 75 mm. gun section from position on this hill (K) will protect the development and support the attack. On red rocket fired from I, it will neutralize the farm buildings at G. When this locality is captured, it will move forward to the ridge G-H.

"The rest of the detachment will be in reserve under cover at L. Assembly point at C.

"I shall be with the pivot at J and will advance along the road to C."

Here we have a situation showing a reconnaissance detachment supporting by attack the action of patrols held up by stronger hostile forces as indicated in FSR 189. The captain had three ways open to him for employing his 75 mm. gun:

1. Have the section trail the detachment until actual resistance is encountered and a target is presented on which to fire. The gun would probably not be near a favorable position to fire, or by the time it reached such a position, the target would have disappeared. Neither would the gun be able to give any protection to the column while passing over unfavorable ground.

2. Have the section accompany the detachment by bounds, taking position first at K to cover the advance and deployment, and then change position forward to J to support the attack. This method would be advisable in supporting infantry which moves slower. From K, the gun could cover the advance to the ridge J and the woods at I. As soon as the leading infantry elements reach this line, the section would move forward at a trot and be in position at J to support the attack before the infantry completes its deployment. With a platoon of two guns, the advance could have been covered with one gun in position at K while the other advanced to J to be later joined by the rear gun.

3. Occupy a single position from which the gun can cover the deployment and support the attack. While the position at K is more distant, it offers excellent observation and is within effective range of the objective. We must keep in mind that cavalry can move rapidly and quickly transport its fire power to a critical locality. Therefore, we shall have very little time for a change of position. As long as the position at K offers good observation of the hostile objective and particularly of the critical locality at G, against which the decisive attack is to be launched, a single position is preferable. The first consideration in the selection of any position is good observation. If this is assured, a thousand yards more or less in range does not make much difference at ranges under 4,000 yards. Here again, the gun will take a position with less than dismounted defilade. As soon as the gun is in position, it is laid on the road at the ridge G-H. Fire is opened on the first suitable target that discloses itself, preferably on machine guns. On red rocket, the fire will be switched to the farm yard at G and delivered at a rapid rate. This fire will cease or be lifted to some other point when the attack arrives within 200 yards of the objective.

Advance Guard

Let us now consider the employment of field artillery with a cavalry advance guard. Our FSR lay down three important principles governing the employment of artillery which apply to a cavalry advance guard:

"233. A cavalry advance guard moves by bounds from one terrain line to another."

"231. As soon as the situation indicates the necessity for artillery support, the advance guard artillery marches in a state of increased readiness for action. One echelon of the artillery takes up a position in readiness or in observation, while the other moves forward to an advanced position. The artillery thus successively advances by echelon from position to position."

"446. . . . As far as practicable the commander must insure that troops do not come under hostile fire without artillery protection."

Let us see how these principles should be applied.

An advance guard with a battery attached is advancing against an enemy reported on the previous day. Through his reconnaissance detail with the leading cavalry elements and from the map, the captain of Battery A should determine, as soon as the march is begun, the successive suitable artillery positions along the route of march. Let us assume that each of the successive terrain lines to which the elements of the advance will make their bounds offer good observation of the intervening ground to the next terrain line in front, and that the average distance between these successive terrain lines is about 2,500 yards, which would be the case in ordinary terrain.

Now, this distance is too short to justify a displacement of a battery. As a general rule, if observation permits, a unit as large as a battery should be displaced about half its maximum range. For the 75 mm. gun that would be about 4,500 yards.

By dividing our advance guard battery into two echelons of a platoon each, that leap frog each other as the column advances, we will have each echelon making a bound of 4,000 to 5,000 yards, conforming more or less to the bounds made by the cavalry. In this way we will always have some artillery in position when support is needed. As long as contact with the enemy has not been made or is not imminent, the advance guard artillery would, of course, not be committed to any position but would continue to march in the column at the tail of the reserve.

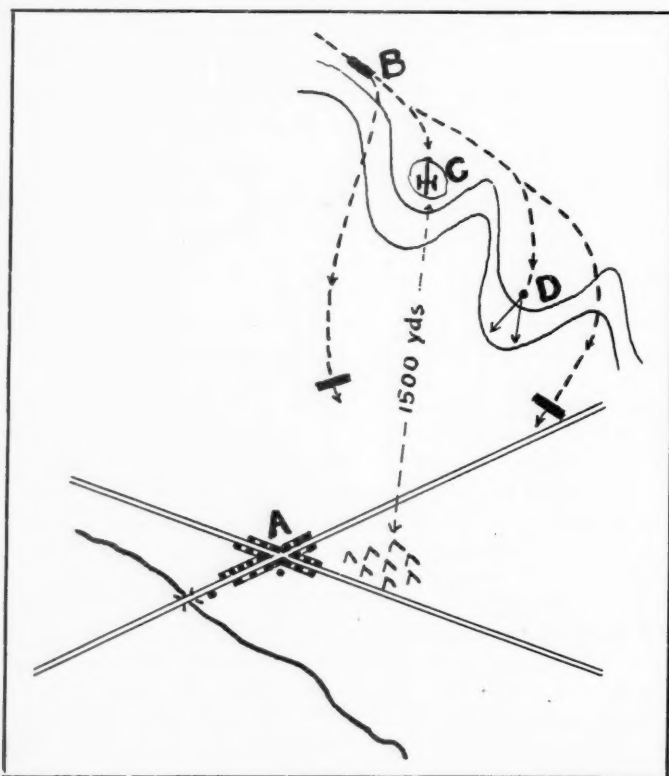
Let us assume that the advance guard commander, marching at the head of the reserve, receives information from his ground or air reconnaissance that a half-hour earlier, a hostile column, preceded at one mile by an advance guard, was observed approaching. The advance guard commander and the captain of Battery A now know that contact is imminent. Within certain limits they can estimate where the enemy will be met.

With the modern mobile means which an advance guard may have, the exact point of meeting cannot be predicted. But the advance guard commander knows that he will encounter the enemy soon and that he must now take steps to put his advance guard in a state of increased readiness for action and take measures that it does not come under hostile fire without artillery protection. What should he do? He should at once order Battery A to clear the march column and advance at an increased gait to the first critical terrain line, one platoon being posted in readiness, while the other platoon continues its advance under the protection of the advance guard support and the first platoon to a position farther to the front. As soon as the second platoon has reached its position, the first platoon advances at a trot to the front. If the advance guard support has not yet encountered the enemy, the first platoon continues its advance to a position still farther forward. These alternate bounds by the advance guard artillery are continued until the progress of the advance guard is stopped. Each echelon in rear covers the advance of the advance guard during its bound to the next terrain line.

Now let us assume that the advance guard support encounters the enemy during this forward movement. One platoon is always in position to give

immediate fire support and the battery can be quickly assembled if necessary. If, however, the advance guard support, thanks to the timely support of the platoon in position, is able to overcome the hostile resistance, the rear platoon, advancing from its last position, will pass on and go to the next favorable position, where it will continue to support the advance guard and be joined shortly by the other platoon advancing from the rear.

The advance guard artillery, when finally in position, should not be used



Sketch No. 3

to fire on small hostile cavalry groups. Its principal initial objectives are the enemy's main columns. The leading hostile elements can usually be taken care of by the fire and maneuver of the rifle and machine gun elements of the advance guard. The important mission of the advance guard artillery is to delay the advance of the hostile main body, to prevent the enemy's artillery from getting into action, and to assist the advance guard in holding or gaining a good terrain line which will protect the development of our main body and give the commander the necessary time to formulate his plan of action.

It may also happen that the enemy has an advantage in terrain or deploy-

ment, or that our advance guard, due to its distance in front of the main body must take a defensive attitude to gain time or hold a certain terrain line until the arrival of the main body. In this case the advance guard artillery from its position on the last terrain line in rear will be prepared to support the advance guard in its delaying action.

Surprise Attack

A force consisting of Troop A, with a machine gun platoon and a 75 mm. gun section attached, has been ordered to march at night and make a surprise attack on a hostile reconnaissance detachment which bivouacked at A just before dark (See Sketch No. 3). Reliable information from friendly inhabitants indicates that the enemy's security measures consist of patrols on the principal routes of approach and an interior guard to protect the detachment and its animals against surprise by local inhabitants. At 3:00 A. M., our force, guided by local inhabitants, arrived at a rendezvous at B in the following order of march:

Advance guard: One squad, Troop A: *Main body* (in order of march): Troop A, less one platoon; Machine gun platoon; 75 mm. gun section; One platoon, Troop A, less one squad.

Assembling the platoon, and attached artillery commanders at hill C, the captain of Troop A points out to them the location of the enemy's bivouac, which is barely visible, and orders:

"We attack the enemy in bivouac at A.

"1st Platoon moving west of this hill (C) will attack mounted from the north.

"2d Platoon moving south of hill D will attack mounted from the northeast. The machine gun platoon on hill D and the 75 mm. gun on hill C will support the attack by a surprise fire.

"Remainder of Troop in mounted reserve in swale near B. It will send patrols to cut the telephone wires on both sides of A.

"At 3:30 A. M., the machine gun platoon and the 75 mm. gun will open a rapid fire for five minutes on the hostile bivouac and then cease fire. Under cover of this fire the two assault platoons will advance within close range of the hostile bivouac, which they will rush when the artillery and machine guns cease fire.

"I shall follow with the reserve.

"Artillery and machine guns will remain in present position until the signal, three green rockets, is fired from the vicinity of A.

"It is now 3:05 A. M. Set your watches and move out."

In this situation the poor light of early dawn precludes any direct support by artillery and machine guns during the attack. Any support given by these units must be in the nature of a preparation fire which should cease as soon as our cavalry arrives within assaulting distance. A long preparation is out of the question because a material destruction is not contemplated. A short preparation, not exceeding five minutes, will preserve the element of surprise, and have a powerful psychological effect which will demoralize the enemy and increase his confusion. Without this preparation, the enemy would no doubt be surprised, but he could quickly recover therefrom and, under determined leadership, could put up a strong resistance in which neither artillery nor machine guns could intervene without endangering friend and foe alike. Therefore, if these auxiliary weapons are not used as above indicated, they had better be left behind.

In the five minutes prescribed for the artillery preparation, the 75 mm. gun should be able to fire about 40 rounds at the hostile bivouac. The fire will be a zone fire, sweeping, so as to cover an area about 150 yards wide by 200 yards deep with high explosive shell, short fuse. This fire will be supplemented by the volume of machine gun fire coming from a direction more or less oblique. In view of the central location of these fire units, the two assault platoons can approach within very close distance of the objective. As soon as the preparation ceases, the cavalry can launch its attack which will probably be over in a few minutes.

Pursuit

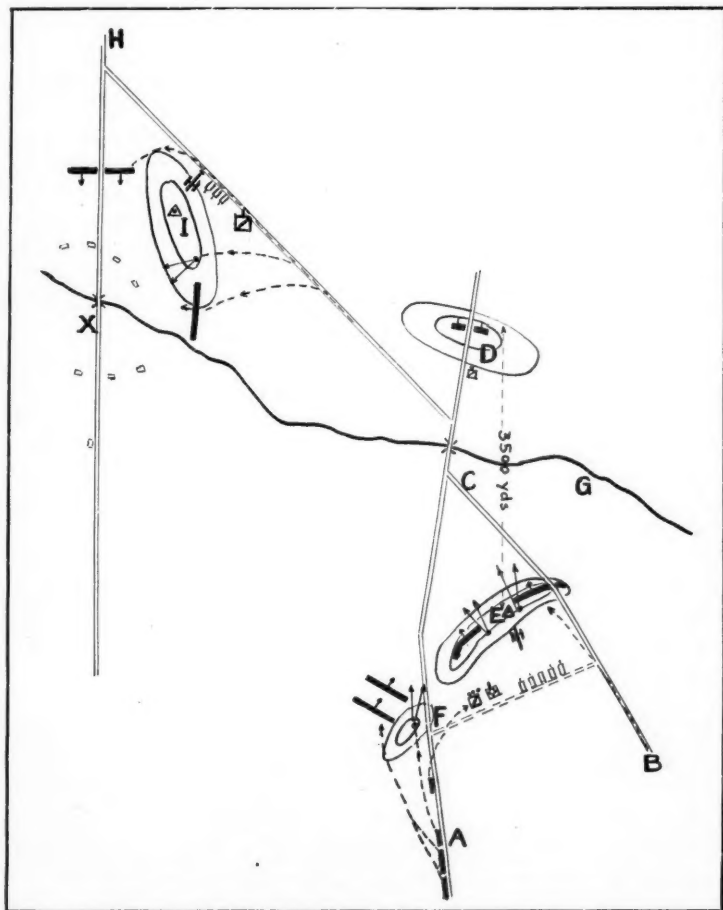
In the pursuit we find a wide decentralization in the control of field artillery, particularly in the artillery attached to the cavalry engaged in the encircling maneuver. The need for rapid maneuver indicates the use of horse or portée artillery. No more artillery should be attached than can be adequately supplied with ammunition. In the case of portée artillery it will, therefore, usually be necessary to send along extra trucks loaded with ammunition. When the distance of the pursuit is not over 10 or 12 miles, portée artillery has little or no advantage over horse artillery, especially when we consider that the enemy will endeavor to block and offer the maximum delay on those roads that are suitable for motor transport. Portée artillery has an advantage in a wide encirclement, directed at a point well to the rear on the enemy's line of retreat, and permitting use of roads that will probably not be blocked to motor transport.

In order to bring out the employment of a small artillery unit in the pursuit, a number of successive situations have been selected, picturing the action of a reinforced cavalry squadron which has the mission of gaining a critical locality by an outflanking maneuver in order to place itself across the enemy's line of retreat. (See FSR 490). It will be noted that the attached artillery adds great fire power to the cavalry and constitutes a most effective means of defeating the enemy's attempts to reorganize his forces for resistance or retreat. In each situation the artillery is used on objectives which cavalry would be unable to engage with its own weapons. The missions assigned to the attached artillery are such as will at the particular moment contribute most effectively to the success of the action as a whole.

The 1st Squadron, with Troop A, 1st Machine Gun Squadron, 1st Platoon, Armored Cars and a platoon of Battery A (75 mm. guns, portée) attached, is advancing in pursuit of a defeated enemy. It has the mission of encircling the enemy's left flank and blocking his retreat at X (See Sketch No. 4). The major had the 1st Squadron move out in two columns, with the 1st Squadron (less two platoons) and the machine gun troop advancing via A, and the motorized elements, composed of Troop A (less one platoon) in trucks, the armored car platoon and the platoon of portée artillery, advancing via B. In this way, he exploited the greater mobility of his motorized detachment, and avoided mixing motorized and mounted units in the same column. By selecting an exterior route for his motorized detachment, he kept it out of

range of hostile artillery interdiction fires and took advantage of a route that would probably be free of hostile delaying detachments.

Upon approaching the crossing at C, the armored car point of the motor-



Sketch No. 4

ized detachment came under hostile artillery fire from the ridge D and encountered a hostile squadron advancing south from the crossing. The captain of Troop A at once decided to take position on the ridge E to delay the enemy and hold this terrain line until the arrival of the mounted column which he estimates is still about 8 miles away. He, therefore, orders:

"We take position on this ridge (E) to delay the enemy until the arrival of the 1st Squadron.

"The 75 mm. platoon will detruck and go into position near E, opening fire at once on the hostile cavalry column advancing from C.

"Troop A will detruck under cover of this ridge. The first platoon in position astride the road will delay the enemy's advance along the road C-B. The 2d platoon in position on the west slope of this ridge (E) will cover our left flank and delay the enemy's advance along the road C-A.

"The armored car platoon will be in reserve on the road in rear of our left flank and protect the trucks. It will place its reserve machine guns in action in rear of the rifle platoons, opening fire as soon as in position to delay the enemy's advance.

"Trucks will assemble on the road in rear of this ridge prepared for close defense.

"I shall be at the artillery OP at E."

In a delaying action, the artillery is pushed well forward so that it is near a good observation point and can open long range interdiction fire at the earliest practicable moment. In this situation, since there is hostile artillery present, it would take a position with at least mounted defilade (permitting a mounted man to barely see the enemy). Its objective would be the hostile main body. The enemy's deployed groups would be taken under fire by the machine gun and rifle units. Since the rest of the squadron will probably arrive within 1½ or 2 hours, the captain deployed all his rifle power in position and held only his armored cars in reserve. The reserve machine guns carried by each armored car were put into position to support the defense.

The advance and deployment of the hostile squadron were considerably delayed by our machine gun and artillery fire. An hour and a half later, the major, in response to a message from the captain of Troop A, arrived at E with his 1st echelon. The situation as known to the major and assembled officers is as follows:

The enemy is launching his attack with his dismounted pivot, estimated at one troop, advancing frontally against the ridge E. The hostile maneuvering force, estimated at two troops, is advancing mounted west of the road C-A, apparently to envelop our left flank at F. The 1st Squadron is advancing at a trot with its head at A. The major at once ordered:

"We attack, enveloping the hostile right to secure the crossing at C.

"The 1st Squadron (less Troop A) Captain Troop B, commanding, advancing west of the hill F, will attack mounted, striking the hostile maneuvering force in flank. Direction of attack F-G. Assembly point G.

"The Machine Gun Troop will support the attack of the 1st Squadron from position on hill F.

"Troop A (less one platoon) will hold its present position.

"The artillery will concentrate its fire at once on the hostile maneuvering force advancing west of the road C-A. When the 1st Squadron closes in to charge, it will lift its fire and interdict the crossing at C to block the enemy's withdrawal.

"The armored cars will be prepared for early advance via the road F-C.

"3d Platoon, Troop A, will join the armored car platoon in mounted reserve.

"I shall remain here at E.

"Sq. 3, transmit my orders to Captain Troop B and Captain Machine Gun Troop."

The attack was successful. The enemy's dismounted troops were captured. In the resulting mêlée the hostile maneuvering force was either captured or dispersed. The 1st Squadron, less Troop A, is now assembling at G. The hostile reserve, estimated at a platoon of cavalry, is withdrawing with a large number of led horses, seeking to escape by the bridge at C which is being interdicted by our artillery fire. The major at once ordered:

"We continue the advance via C on H.

"Order of march: 1st Squadron, less Troop A, Machine Gun Troop, Platoon Battery A, Troop A, less 1 platoon.

"The 3d Platoon, Troop A, preceded by the armored car platoon, will advance rapidly via C, capture the hostile reserve and led horses, and push on to ridge D, which it will hold to cover the crossing of the command. After the column has crossed, it will remain at D to secure the crossing at C and protect the column against any attack from the rear.

"As soon as the 3d Platoon, Troop A, has gained ridge D, the armored car platoon will advance on H on reconnaissance. Early information is desired of the enemy's defensive dispositions at the crossing at X and of hostile troop movements to the north.

"The 1st Squadron, less Troop A, and the machine gun troop will advance to C, cross the bridge and assemble in march formation with head of column on the road to H.

"The artillery will protect the crossing. As soon as the machine gun troop is across the bridge, the artillery will untrunk and join the march column.

"Troop A, less 1 platoon, after mounting itself from captured horses, will collect the wounded, prisoners and captured material, and send them by truck under suitable escort via B to O. It will then join the tail of the column.

"I will join the column at the bridge.

"Sq. 3, see that the necessary orders are transmitted to those not present."

After sending back a report of the operations of the squadron to his next superior, the major joined the column at C. He then ordered the column to move out with a platoon of Troop B in the advance guard. As the head of the column was approaching hill I, he received a report from a returning armored car:

"A hostile truck column with its head at H has just cleared the bridge at X. Hill I is unoccupied by the enemy. Bridge at X is protected by a security detachment estimated at a battalion of infantry, part of which is south of the bridge."

The major decides to let the hostile truck column go by and to carry out his mission of blocking the enemy's retreat at X. He, therefore, orders as follows:

"We attack the enemy at X, to capture the bridge and block the enemy's route of retreat.

"Troop B advancing north of hill I will attack dismounted astride the road H-X.

"Troop C advancing south of hill I will attack dismounted with its left flank along the stream C-X.

"The machine gun troop, from positions on the south slope of hill I, and the artillery from position on the north slope of hill I, will support the attack. They will open fire without delay on the bridge at X and interdict it to hostile troops.

"The armored car platoon will cover our right at H. Early report is desired of any hostile troops advancing on H from the north.

"Troop A (less one platoon) upon arrival will remain on the road east of hill I in mounted reserve.

"Led horses under cover of hill I.

"I shall be on hill I."

Conclusion

In presenting these situations, the purpose has been to emphasize the importance of having junior officers of cavalry understand the employment of small field artillery units. They need not wait until they become field or general officers before trying a hand at the game. If they begin now to think of the effective support that field artillery can give them in the numerous situations involving the employment of small cavalry units, then they will find no difficulty later on in using larger field artillery units forming a part of higher cavalry commands. The situations outlined in this article and many others of a like nature can be worked out very easily on the terrain in the vicinity of every cavalry post and, I am sure, will lend not only variety to, but also inject more realism and interest in, the tactical instruction of cavalry

Armored Vehicles With Cavalry

By FIRST LIEUT. EUGENE FERRY SMITH, *Infantry (Tanks)*

Member of the Tank Board

THERE is a responsible body of opinion holding that, in principle, the day of the horse is over and that the duties of the cavalry should be performed, and would be better performed, by aeroplanes and by troops mounted in rapidly moving cross-country vehicles, such as light, fast tanks and armored cars.

"On the other hand it is urged that there are many military situations possible in various parts of the world in which a mechanically transported unit would be at a great disadvantage. At present, an unbridged river presents an impassable obstacle to tanks, and presents but few difficulties to cavalry. There are many rivers in the countries in which our army must be prepared to operate. What, then, is the truth between these two conflicting opinions?"

It is believed that the Secretary of State for War of Great Britain, when he began his speech to the English Parliament with the above in explanation of why they were mechanizing a part of the British Army, states as clearly as is possible the views of the two schools of thought on the matter of the mechanization of the entire army. He proposes a question that is taxing the minds of the general staffs of the armies of many nations.

Strong supporters and advocates of each of these schools of thought can be found in almost any country. However, it is not the aim or intention of the writer to attempt to decide the issue in this article, but rather to set forth in general the possibilities and limitations of the use of tanks and armored cars with cavalry.

It does not require any great thought to realize that, for the bulk of the infantry, the mechanization will be limited primarily to using motor vehicles for transporting large masses of troops from place to place, with accompanying tanks or armored cars used for scouting, flank protection and the brunt of the combat. For holding purposes, the individual soldier will undoubtedly remain supreme and, in terrain unfavorable to the use of motorized vehicles, the functions of the infantry will not materially change.

The cavalry, however, presents a slightly different problem in view of its horses. The transporting of large bodies of cavalry by motor truck would require an enormous number of vehicles to move the animals, so that such a development may safely be passed by for the present, although not without its possibilities in the future, especially for movements of small detachments.

Many who are strong advocates of the motorization and mechanization of armies advance the thought that future wars will be fought entirely by aeroplanes and tanks. But saner thought will indicate that, so long as there remain mountains, valleys, rivers and forests, there will always be natural obstacles for the motor driven vehicles (be they tanks, armored cars, or trucks), and that there will always remain regions where the individual

soldier, mounted on a horse or packing his weapons on his back if necessary, and supported by light artillery, can occupy critical points of which he can deny the passage to the enemy vehicles.

When one talks of complete mechanization, has not one been thinking too much of a battleground with elaborate trench systems and a stabilized front, or of one in which the country has highly developed road and railroad systems, where water and fuel are always available? But what of a war in which, for example, our country is invaded, either from the north or the south, or by a landing on our very shores? Can one then say, with fighting going on in the arid regions of the Mexican border, in the broken mountainous country of the north, or from a base on either the East or the West coast, that there will be no need or use for the individual cavalryman, even if we can provide large masses of tanks and cross-country armored cars? Would not the cost be prohibitive and the physical limitations of maneuver, maintenance and supply of all this equipment be such that it soon would surpass the limits of practicability?

Let us assume then that cavalry will still have its place in any future war of no matter what magnitude. This brings us to the question of whether or not armored cross-country cars and tanks can be operated successfully with cavalry, and if so, how they can be used to the best advantage. To best answer this, it will be well, perhaps, to take each of the various missions of cavalry and see how they are affected by the advent of the mechanized forces.

But before doing this, let us first see what the post war developments and trend of construction of tanks and armored cars have been and then try to vision the future, with its possible developments along the lines indicated of still greater and improved mechanization.

The United States today has no tank available for combat, except the Heavy Tank (Mark VIII) and the Light Tank ($7\frac{1}{2}$ tons), both developed during the war. The Mark VIII weighs 40 tons and requires railroad transportation for moves of any considerable distance. Its weight and armament (two 6-pounder cannon and five machine guns) makes it suitable for special attacks against villages or strongly fortified points, but its lack of continued mechanical dependability, its weight and dependency upon railroads for transportation makes it immediately unavailable for use with cavalry, in any but very special situations and missions. We can ignore it so far as this study is concerned.

The light tank has a speed of about 6 miles an hour in high gear, mounts either a 37 mm. gun or a .30 caliber machine gun, weighs $7\frac{1}{2}$ tons when fully equipped and can be readily transported on trucks over good roads. Properly maintained, it is mechanically reasonably dependable. In favorable terrain it can keep up with cavalry, but, due to its construction and the method of track suspension, it is subject to rapid mechanical deterioration and requires considerable maintenance, especially when travelling over rough and broken terrain. It has the further disadvantage of having only one type of weapon in each tank, the 37 mm. gun for use against material, or the .30 caliber

machine gun for use against personnel. Because of the limited vision of the driver and the gunner, it is necessary to make a thorough reconnaissance of the routes to be followed by the tanks when travelling across country, in order to save time and avoid the possibility of ditching the tank. Except for deep water, swamps and exceedingly dense forests, or extraordinarily steep or rocky slopes, the light tank, manned by a reasonably well-trained crew, can follow a cavalry horse across country.

As to armored cross-country cars, we have none, aside from such pilot models or experimental vehicles as may still be in operation, nor do we see any present indication of the early production of a vehicle of this type, although Brigadier General S. D. Rockenbach has been urging for a number of years the development of a suitable cross-country armored vehicle.

Foreign Developments

Now, let us see what the foreign armies have developed since the war along the lines of both tanks and armored cars. England apparently has done more than any other nation along this line and is still experimenting on a fairly large scale to obtain more satisfactory vehicles of each type for its varying needs. To date they have produced, among other vehicles, the Vickers tank, weighing about 10 tons and reputed to have a road speed of 20 to 25 miles an hour and a cross-country average speed of about 15 miles an hour. Carrying a crew of five men and mounting a 3-pounder and six machine guns, first accounts credited this tank with being an unqualified success, but later reports would indicate that its performances, under any but favorable conditions, are not what were hoped for and that it is being materially modified.

To eliminate the necessity of using tracks on roads, experimental tanks have been built which have wheels for road use and tracks for cross-country use, the change from one to the other being accomplished in about one minute, without the necessity of the crew dismounting.

The English have also been experimenting on a comparatively large scale with the "tankette," or very light tank of less than 3 tons. It is armor proofed against armor-piercing bullets, capable of being operated, at least theoretically, by one man, with a road speed of 30 miles an hour and a cross-country speed of 20 miles an hour, and is armed with a machine gun. Many prophesy that this will be the future means of fighting for the infantryman.

The British have had in use for some years two general types of armored cars, the Crossley and the Rolls-Royce, both with an average economical speed of from 25 to 30 miles an hour and a cruising radius of about 125 miles. Both have a crew of four men and weigh approximately 5 tons. The Rolls-Royce mounts one Vickers machine gun and the Crossley two. The latter is considered the more satisfactory of the two cars, but it must be borne in mind that both of these are strictly armored cars, designed for use on fairly good roads and suitable for fast reconnaissance work, but as at present designed they are helpless when forced to take to the countryside.

Czechoslovakia has produced a new light tank similar in general appear-

ance to the French Renault, but with a new development in a set of wheels that permits the tank to be operated on wheels on good roads and on tracks across country. It requires about three minutes for a trained crew to change from wheels to tracks. They must, however, dismount to effect the change, an appreciable disadvantage when one considers that the tank may be under artillery or airplane fire. This tank has a crew of three and mounts either a 37 mm. gun or a machine gun.

Russia has constructed some tanks that largely resemble the French Renault, but mounting a 37 mm. gun and a machine gun in the same ball mount.

France has produced no new light tanks, although experiments are being made with a small 2½-ton tank having a credited road speed of 35 miles an hour.

Other foreign nations have produced tanks, none of which, however, show any startlingly new characteristics.

Germany, which is not allowed tanks under the Treaty of Versailles, has been experimenting with the transportation of all kinds of troops with all their equipment, including horses, guns, dummy tanks and accompanying weapons, by motor trucks, both by day and by night and over varied terrain. As many as six horses have been carried on one truck, the newer ones of which are equipped with heavy balloon tires. In one instance, a battalion of infantry was moved with all its material, including horses, a distance of about 500 miles, making two night halts on the way.

From the above we can readily see that the trend of development is toward:

1. A greater mechanization of armies.
2. A light tank weighing about 7 tons, having a cross-country speed of 15 to 20 miles an hour and a road speed of at least 25 miles an hour, mounting both a 37 mm. gun and a machine gun, and having a crew of two or three men. Such a tank could readily operate with cavalry.
3. A smaller fast tank, or "tankette," weighing about 2 tons, having a cross-country speed of at least 15 miles an hour and a road speed of at least 25 miles an hour, mounting a machine gun, and having a crew of one or two men.
4. An armored car that will be capable of maneuvering off the road, in addition to its present characteristics.
5. Motor transportation for the cavalry and infantry to enable them to move long distances without the fatigue of marching and with a big saving in time.

Let us now return to the question of the possibilities and limitations of the armored vehicle (for the future development will allow the tank to run on the roads and the armored car to move across country so they may both be grouped under this one head) in conjunction with cavalry in its more important missions.

Reconnaissance and Counterreconnaissance

It is here that the armored vehicle can prove quite useful. With a cruising radius of 125 miles or more, it can be sent far ahead of the main body to gain and maintain contact with the enemy, or to deny to it the information

it seeks as to our own forces, by driving off hostile reconnaissance detachments or by means of ambushes.

For detailed reconnaissance and for work at night and in bad weather, the value of armored vehicles diminishes very rapidly, due to the very limited field of vision from the vehicle itself under the best of weather conditions, the fact that it is more or less confined to roads and trails in its more rapid movements, and because its personnel is limited and their observation is necessarily more or less confined to such as can be obtained from the vehicle or from its immediate vicinity.

Perhaps future developments will provide a suitable motor vehicle, in which a limited number of horses can be transported, to accompany such



British Carden-Lloyd Tankette or One Man Tank

armored vehicles and provide a means of more detailed reconnaissance whenever desired.

Security for Other Forces

The extent to which armored vehicles can be used on patrol work, with security detachments, is dependent largely upon the armament of the hostile forces and more particularly on the presence of enemy armored vehicles, anti-tank weapons and artillery.

The use of armored vehicles with advance guards, because of their invulnerability to machine gun and rifle fire, will be a great advantage, not only because they inspire confidence in the troops they are accompanying, but also because of the moral effect upon the hostile forces. Even though not actually moving on the road over which the hostile forces are operating, the mere presence of armored vehicles, which are capable of suddenly cutting off their retreat, will often cause the hostile patrols to become chary about advancing too far from their main body.

For this class of work the armored vehicles move ahead to some important feature of the terrain, waiting there for the remainder of the patrol

to catch up, when they again bound forward, these bounds being about four or five miles each.

Naturally, against a hostile force weak in artillery and in anti-tank weapons and possessing itself but few, if any, armored vehicles, our armored vehicle, in terrain suitable for its use, will be the ideal weapon for patrol duty or for use as a fixed blockhouse. But, with a hostile force armed with anti-tank weapons, armored vehicles and good artillery, our use of the armored vehicle for such purposes becomes more complicated. Instead of being able to advance almost at will, or to remain in a more or less stationary position as in the previous situation, it will have to advance more cautiously and might, in some instances, require reconnaissance by cavalry to guard it against ambushes.

For flank guards, a mixture of cavalry, armored vehicles and artillery make the best combination. Generally resolving itself into taking up a series of successive positions on the flank to be protected and holding them until the main body has passed the danger point, this type of duty presents numerous difficulties.

To secure the desired position and then to get in touch with the enemy, the armored vehicles can be sent out at full speed, while the cavalry and the artillery are brought up later at their own most economical speed to occupy the position and hold it until the withdrawal takes place. This phase of the operation is comparatively simple, but when the order comes for the withdrawal the difficulties rapidly increase for, if the enemy has deployed, it is usually necessary for us to withdraw more or less parallel to his line of attack.

One method is for the armored vehicles to attack vigorously, while the cavalry and the artillery are withdrawing and reforming, and then to suddenly withdraw and take up new positions for the next stand. Another method is to lay ambushes for the enemy (for which type of work the armored vehicles being able to lie hidden from observation are well fitted) and, after firing into the advancing masses of the hostile troops, to effect a rapid withdrawal under cover of the surprise. Concealment is simple; the personnel being inside the vehicle no involuntary movement of theirs will disclose their presence. If the hostile infantry is allowed to advance well up toward the armored vehicles before fire is opened, the hostile artillery will be handicapped in its firing, if not deterred entirely from it, because of the fear of hitting their own troops.

Rear guards will ordinarily be conducted on the same principles and under the same conditions as flank guards, with the exception that in general the pursuing troops will be attacking much more vigorously and the defense will in consequence have to be more determined.

Standing patrol work offers an excellent field for the use of armored vehicles. They can be stationed (in concealment, of course) along the roads or trails, which a hostile patrol of any size must, in general, use, if it is to progress at all rapidly. The crew of the armored vehicle, being in comparative comfort inside the vehicle and protected against any infantry fire, can inflict severe casualties on any hostile patrols and, if equipped with search-

lights, can inflict even greater losses. As soon as one patrol is disposed of, they can rapidly move to another position so as to escape possible artillery retaliation and to be ready for another encounter.

As in battle reconnaissance, the vulnerability of the armored vehicle to artillery and airplane fire and to anti-tank weapons would limit its use very materially for battle security, except on the flanks. Here, in conjunction with cavalry, they can be used to good advantage to repel flanking attacks by the hostile forces, particularly raids or attacks by hostile armored vehicles and cavalry. Their great mobility and their radius of action enable them to keep patrolling along the flanks sufficiently far away to give ample warning to the main body to prepare for an attack from that quarter.

Offensive and Defensive Action in Cooperation with Other Arms in Battle

As now used in the support of infantry in breaking up strong hostile centers of resistance to enable the advance to continue, so also, with the cavalry, the armored vehicle can be used for such purposes.

It is not without the bounds of possibilities that in the future many actions in suitable terrain will be fought largely by masses of armored vehicles and that after the decision has been reached cavalry will be brought up in trucks to mop up and hold the ground gained and to assist in the pursuit.

Delaying Hostile Forces or Holding Terrain of Tactical Importance Until the Arrival of Other Friendly Forces

Here again the armored vehicle can extend the field of activity of the cavalry.

If the commanding officer of the forces on the march desires to hold some defile or river-crossing thirty, forty or more miles away, through or over which his troops have to pass, he would find a company of armored vehicles the ideal means for seizing and holding the place until other troops could be brought up.

In speaking of holding a place by armored vehicles, one must not get the idea that the entire company of vehicles would go into position and remain on the spot. Rather would sections or platoons be sent out on continued reconnaissance to the front and flanks to get and keep contact with the enemy, while the remaining portion of the company created ambushes in and near the locality to be held, in case the hostile forces should arrive before the main body of friendly troops had arrived.

The supporting cavalry should be brought up at the earliest possible moment, in order to release the armored vehicles for work to which they are better suited and more valuable than that of holding ground.

Liaison

The use of armored vehicles other than signal vehicles (of which we have no satisfactory types at present) for liaison purposes is not properly within their sphere, as they are designed for combat purposes and are too valuable

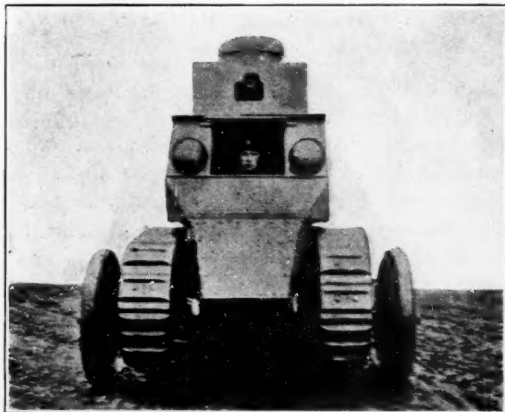
as such to be employed for carrying messages, except under exceptional circumstances.

The perfection of a satisfactory radio telephone, that can be carried in an armored vehicle and is capable of operation over distances up to at least 100 miles, will increase immeasurably the value of the armored vehicle for reconnaissance work and liaison. Then such information as they can obtain will reach the force commander in time to be of real value to him.

Exploitation of a Break-through

Once a break-through has been accomplished and the strong centers of resistance, with their concentrations of machine guns and automatic rifles, have been crushed or driven back, the cavalry again has an opportunity to get into close combat and operate in the rear areas.

To destroy any temporary centers of resistance or isolated machine gun nests, the armored vehicle can be of untold value to the cavalry in such an



New Czechoslovakian Tank with Wheels and Tracks

exploitation. It can be used to push ahead and move rapidly to the rear of the troops on either side of the break-through, causing greater demoralization by reason of its presence. It must not be forgotten, however, that it cannot hold ground thus gained for any length of time and that support must be given it as soon as possible.

Pursuit

Closely akin to the use of armored vehicles in a break-through is their use in pursuit, except that in the latter use one must not forget that they are continually getting closer and closer to the enemy main body and heavier artillery, and are hence more liable to suffer casualties from such sources.

Also, as there is more danger, in such an action, of encountering the enemy anti-tank weapon and his counter-attacking or ambushing armored vehicle, care must be exercised that the pursuing armored vehicle does not

get too far from the main body of troops it is supporting, lest it be annihilated without rendering just returns.

Covering a Withdrawal

This, similar to the movement of a flank guard in the face of a deployed enemy, is a delicate operation and for the armored vehicle presents two methods: first a counter-attack, which will cause the pursuing troops to deploy, while the friendly cavalry is withdrawing and reforming; second, ambushes, which allow the enemy infantry to reach close proximity, followed by a sudden attack and a quick withdrawal, before the enemy artillery and anti-tank weapons can get into action.

Raids

Whether or not the armored vehicle will prove successful on raids is a hard question to answer. It has mobility, a large cruising radius and does not become fatigued as does the horse. But its vulnerability to airplane and artillery fire is a serious handicap to its use for such a purpose, especially during the heaviest part of the operation. At times, such use might be justified, but the loss of one or two machines in a raid will require large gains in results by way of compensation.

Conclusion

This covers the major missions of cavalry and shows the possibilities of the use of tanks and armored cars in conjunction with it.

Lest the supporter of the continuance of cavalry as one of the principal combat arms be too discouraged by the picture painted by the ardent advocate of a completely mechanized army (*sans* horse, *sans* infantry), let me quote the conclusions reached by General Weygand, of the French Army, after a close study of the lessons learned at the army maneuvers in Lorraine, as reported in Associated Press dispatches.

"The idea that cavalry is a thing of the past is a delusion. A cavalry force, if kept perfectly mobile, has immense tactical value. Cavalry divisions, however, need to be supported by a far larger amount of mechanical transport. Machine gun detachments, tanks and field artillery must all follow the light cavalry divisions so as to keep in the closest touch."

Major General Sir Ernest Swinton, K.B.E., C.B., D.S.O., of the British Army, in an article on *Tank Wars of the Future*, appearing in the October, 1927, number of the *Royal Tank Corps Journal*, says, in part:

"The broad lines of what, in my opinion, will happen if mechanization is adopted on a large scale by the leading nations are as follows: In theatres, such as mountainous and forest countries, where cross-country machines cannot function, the present methods of warfare will remain unchanged. Where operations are being carried on in flat, open country, where cross-country machines can function, the actual fighting will be done by machines of a tank nature. And until all such machines of one side are knocked out, or otherwise disposed of, there will be no chance of the employment within the scope of their activity of cavalry, of infantry, of any but long range artillery, or of machine guns out in the open."

Time alone will answer the question.

Protection From Enemy Aircraft

By MAJOR E. M. WHITING, *2d Cavalry*

IN September, 1927, the 2d Squadron, 2d Cavalry, executed a march, a combat employing combined action against a represented mounted enemy. and went into bivouac in the open, all in the presence of a flight of three hostile attack planes; the whole operation being observed by the commander of the air squadron stationed at The Cavalry School. The action of the cavalry throughout was governed by the tentative changes and additions to existing training regulations prepared after many experiments and tests by a special board convened at The Cavalry School. It should be stated at the beginning that the fundamental idea of these tentative regulations is to train cavalry to execute ground missions, while at the same time protecting itself from observation and attack by hostile aircraft.

The doctrine of fire and movement applies to defensive measures against hostile aircraft as well as against ground troops but, until exhaustive experiments have determined whether or not small arms in the hands of individuals are effective against low-flying aircraft and, if effective, which weapons used in which manner are the most effective and a definite ratio established between machine guns fired from suitable mounts and a certain number of rifles in the hands of individuals, it will be necessary for the cavalry to depend principally upon movement to avoid losses from air attack.

In the situation, the cavalry squadron was required to make a march of about twelve miles to the scene of its expected encounter with an enemy squadron. Although no encounter with enemy ground troops was expected during the march to the battlefield, the march was conducted as though ground troops might be encountered, with an advance guard and patrols covering the front. Normally, the advance guard of a squadron is a platoon, with its quota of machine rifles attached but, in this case, as attack by attack aviation was expected, the advance guard consisted of two rifle platoons and two machine rifle squads, in order to enable the advance guard commander to post machine riflemen and riflemen in advantageous positions to cover the passing of defiles or other locations favorable to air attack. When the tail of the column cleared the defile or other dangerous point, these detachments mounted and reported to the commander at the head of the main body, who retained them there or sent them forward to the advance guard commander for further use as he saw fit. Familiarity with the route to be traveled or careful study of the map will indicate to the advance guard commander how many and what sort of defiles may be expected.

At first glance, it might appear that the horses of these detachments would be overworked in passing several times at an increased gait from the rear to the front of the column, but the fact is that during the time the column is passing the defiles, these horses are resting, free from the weight of their loads. As the machine rifle is too heavy for effective use as a shoulder weapon

against a fast-moving airplane, the machine riflemen are instructed to make use of fence posts, saplings or any other objects that serve as rests while firing. The riflemen turned their horses over to horseholders and took posts near the road, if practicable not closer than sixty yards to the machine riflemen, in order to avoid the effect of a bomb that might be dropped on the machine riflemen. It is important that a group covering the passage of a defile take position as near the road as possible in order to place fire as long as possible on the planes, for they always attack a column along its length. Another duty assigned to the riflemen re-enforcing the advance guard is to make openings in the fences along the road at frequent intervals to facilitate the rapid departure from the road by elements of the main body nearest the openings in case of attack by aircraft. Approaching defiles, platoons trotted out in succession and passed the defiles at the trot with about seventy-five yards distance between platoons, except in the case of long steep slopes, which were passed at the walk. Long, steep slopes are more dangerous for artillery and wagons than for cavalry.

During the march, the squadron was attacked several times, but the two air scouts of each troop were able to give warning of the attacks never less than a minute and a half before any attack commenced. Much can be done by trained troops in a minute and a half. The trains followed the squadron at about a quarter of a mile, with about seventy-five yards distance between wagons. Marching thus, they do not present a profitable target.

At noon, the squadron took cover in thick woods, with about a hundred yards distance and interval between troops. Here the wagons joined their troops and horses were unsaddled, watered, fed and groomed in perfect safety from air observation.

At 2:00 P. M., by agreement with the air corps, the squadron mounted and moved out into the open, preceded by the advance guard. But for fifteen minutes before moving out, three enemy planes searched the woods, particularly the edges, for signs of troops. None could be seen, but just as the order to fall in was given, the nine recruits of one troop moved across a small clearing in the woods just as a plane flew over and the observer spotted them. This incident impressed all that particular care must be taken to prevent troops from exposing themselves upon arrival in cover and when about to depart. One wagon was unharnessed in the woods and then moved by hand a short distance forward near the edge. It was safe enough there, but when ordered to hitch in, the teamster calmly moved his mules forward to hitch in and the lead mules were just outside of the cover. A watchful sergeant hurried them back before they were seen.

The squadron moved out of the woods at 2:00 P. M., preceded by an advance guard of one platoon and one machine rifle squad. As the march from here on was to be in open unfenced country, there was no necessity for the additional riflemen and machine riflemen. These conditions also made it unnecessary to halt and fire on attacking aircraft and the major instructed the captains to this effect before starting.

The approach to the reported location of the enemy squadron was made in line of troop columns at about two hundred yards interval, the squadron being covered by the advance guard and flanking patrols. Between the squadron and the enemy was a high ridge, with gently sloping sides. The advance guard galloped forward and seized the ridge, dispersing their led horses by squad with about seventy-five yards distance and interval between squads to avoid bombing. While the major and the three captains were reconnoitering under cover of the now dismounted advance guard, which had reported the location of the enemy squadron beyond the ridge, the squadron was attacked by three enemy planes. However, the air scouts had given warning, and the planes found the troops already dispersed in flocks, with from ten to twenty yards distance and interval between troopers.

After a quick reconnaissance, two troops were sent to attack the enemy in right flank and rear, while the remaining troop constituted the pivot and the reserve. All of the machine rifles of the remaining troop were placed on the firing line. The remainder of this troop, under its captain, constituted the mounted reserve and remained under cover of the ridge, deployed in line of platoon columns at seventy-five yards interval. As the radius of the personnel bomb is about sixty yards, this dispersion would prevent more than one platoon from being damaged by any one bomb, and yet kept the troop in hand for instant use. As the maneuvering mass had considerable distance to cover before engaging the enemy, the flock formation was retained until within about five hundred yards of the enemy, when the leading platoons formed line of foragers, the support platoons formed line, and all advanced at a rapid gallop to the charge. Having arrived within five hundred yards of the enemy, there is no further danger from air attack, and the commander may form the flocks in any formation desired within a few seconds.

After a pursuit, the troops, less contact patrols, were withdrawn, moving to the rear in line of platoon columns with air scouts alert. The squadron was now assembled behind a ridge. After reconnaissance, a bivouac position was selected at the intersection of two draws about six hundred yards behind the ridge. An outpost line of resistance was designated on the ridge, a rifle platoon and a machine rifle platoon designated as the outpost, and the squadron, less the outpost, was marched toward the bivouac site, moving in line of platoon columns at about two hundred yards interval. The major and the captains galloped ahead and the bivouac site of each troop was assigned. Care was taken to separate the troops by utilizing the folds of the ground, which served to some extent as traverses.

The troops were then marched by their captains to the bivouac sites and unsaddled by squad, the squads being placed sixty yards apart and the saddles placed so as to avoid straight lines. The horses of the outpost were mobile and brought to their troop bivouac by the horseholders, who unsaddled and cared for them. All horses, as soon as unsaddled, were dispersed in groups of four to graze, each four being held by a trooper. The train, which had been held under cover of a hill in rear during the combat and pursuit, was now

brought forward and the forage, stoves and provisions for supper and breakfast were unloaded, and after unloading, the trains were withdrawn to cover in a wooded draw about a thousand yards in rear of the bivouac, where there was water. Here they remained until dusk, when they returned to the bivouacs. The only water available was near the position of the train and but one platoon could be watered at a time. Each troop in turn, still dispersed in fours, moved down to the vicinity of the water, watered by platoon and returned to the vicinity of the bivouac, where the horses grazed until dusk, when they were tied on platoon picket lines, groomed and fed.

At daylight, the squadron was ready to mount. According to the commander of the air squadron, although it had fought a mounted action, pursued a mounted enemy, gone into bivouac, established an outpost, watered, groomed and fed its animals, fed two meals to the men, all without any cover whatsoever from air observation and attack, except for the trains, at no time was any element of the squadron subject to serious loss from air attack. The protective measures were effective because they were continuous and yet they in no way interfered with the accomplishment of the ground mission.

To the casual reader, it may seem that these protective measures were a whole lot of trouble, but actually they were not, and yet the squadron while in bivouac was prepared to carry out any normal mission that might be expected of a squadron in bivouac. Shortly before dark, the squadron was actually attacked in its bivouac, but the aviators reported that no favorable target was presented. All of the officers and most of the men in the squadron saw the demonstration of bombing last May by attack aviation against a troop of sixty-five mounted targets dispersed in a flock with from five to ten yards distance and interval between individual targets—just half the distance and interval now prescribed in tentative training regulations for the flock formation. Those who heard those terrific explosions and saw the havoc wrought by flying fragments are firm believers in anti-aircraft protective measures involving fire and movement—especially movement.



The 7th Cavalry Column Moves Out at Sunrise in 1st Cavalry Division Maneuvers

TOM'S LETTER

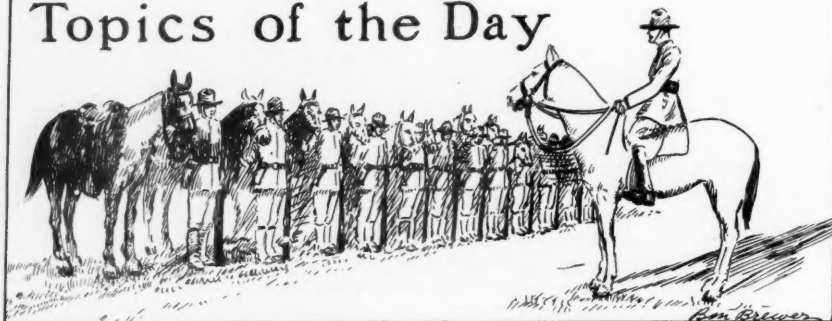
Dear Friend Ed:

I was ast by a prominent rotarian wouldnt I give a talk on cav tactics to the rotarians and I give them a talk Ed which I bet was a good talk because they was all interested and they knew I wouldnt stand for no wise cracks versus the talk I give them. I says well boys 1st the cavalry has got to be as offensive as possible which dont mean that no good cavalry man dont wipe his feet before entering a domicile or chewing at social gatherings but we has got to be embrewed with that spirit. What spirit asts a prominent rotarian interrupting my talk which was give before there own club and well Smarty I says what spirit do you suppose and against that snappy comeback he was speechless. Next I says he has got to be mobil and always remember the early bird catches the worm. Oh apple sauce says another interrupting thats old we know that one. Well I says quick as I wink maybe you been caught once by some early bird eh? I continues bringing out how mobility lets us cross rapidly a fire swept zone and altho it is not necessary to look for a fire swept zone if we was to meet a fire swept zone why you see that would be nuts for us to cross with our mobility. Then I says the real beauty of us is our surprise. You cant never tell which way a cavalry man is going to jump by only looking at the shape of his head. No sir, I says boys it dont never pay to trust a cavalry man on acct of yr not knowing when he may surprise you by the rapidity of his action. Now I will go into combat in which judging from yr appearances none of you know much about except for domestic disturbances. Ed, that went over big and they hand me a good laugh and a big hand. The C. O. we will assume I says is riding with a good ensamble and without no more stiffness in his neck than his rank entitles him to. Behind him the boys is following in column of 4s laughing, smoking and telling jokes when a monnowplane sweeps out of the sky and signals enemy in sight in large numbers. So now we got to approach and develop I says. Well pardon the interruption says another bird but how come you been always absent from the development phase? well I says Big Boy I will take that slide when I come to it—Rome wasnt billed in 1 day if you know what I mean. Anyway the C. O. turns to me and says Tom come with me on personal reconaissance on acct of my wanting a good man along. Laugh that off Big Boy, I says in a aside. So when we got to Hill 589 the C. O. throws hisself into a coma and I thinking he has sleeping sickness maybe nudges him (pointing). Ssh. Ssh. He mutters I am estimating the situation and shortly thereafter he brightens and says in stridn tones we will attack enveloping the hosstile right flank at 2:56 p. m. today driving him to the northeast and pursue to Mrs. Bucks (12345-67890) Shift! I says unconsciously. Well I continues in my talk I will leave that situation now because it developed that the enemy was only a heard of sheep which was grazing on a opposite hill but anyway if that heard of sheep had of been hosstile Red forces you could see for yrselves whot would have become of them with us enveloping there right flank what with our offensive, our mobility, and our surprising them as we would have surprised them if they had not of been sheep.

That was the end of my address Ed which as I says went big so I will stand to remain yr friend

TOM

Topics of the Day



Extracts from the Annual Report of the Chief of Cavalry, Major General Herbert B. Crosby

THE War Department has given great impetus toward increasing the future efficiency and usefulness of the cavalry by its approval in principle of the following:

That the present Springfield rifle in the cavalry be replaced by the semi-automatic rifle as soon as practicable after a satisfactory type has been developed and tested—present development plans and tests for obtaining a suitable arm to continue.

That an armored car unit be similarly developed, tested and incorporated in the cavalry division—development plans to continue and when type is approved which meets the military requirements, consideration can be given to the unit for the cavalry division.

That a tank unit be incorporated in the cavalry division, and appropriate anti-tank weapons in the cavalry regiment—(necessary personnel to be taken from cavalry allotment). Present plans for development and tests to continue, and when the tank and anti-tank weapons which meet military requirements are adopted, further consideration will be given to the numbers to be prescribed for the cavalry division.

That an observation squadron, Air Corps, be incorporated in the cavalry division—to be made effective when Air Corps can supply suitable equipment and the necessary personnel.

Consideration is also being given by the War Department to the reorganization of the cavalry regiment with a machine-gun troop as an integral part and with a decrease in overhead and an increase of fire power.

When these measures have become effective, we are assured of a cavalry that will be most valuable in any type of warfare and in any theatre of operation.

* * * * *

The manufacture and issue of the Browning Machine Rifle to units of the regular army having been completed, the project of securing enough of these

weapons to equip the regular cavalry at war strength was successfully undertaken. Consequently, there is now in corps area storage a sufficient number, with the corresponding number of pack loads and accessories pertaining to the machine rifle, to completely equip the regular units in case of an emergency. It is now imperative that a sufficient number of Phillips' standard pack saddles be manufactured and placed in storage in order that there will be a means of carrying the above loads in case it becomes necessary to issue this equipment. The plans for this work are now being formulated. Although curtailment of funds has somewhat retarded the manufacture, development, test, or adoption of Phillips' pack saddles, their loads and accessories, the results obtained during the fiscal year are satisfactory.

Many unserviceable animals have been replaced during the year. The grade of remounts thus received has been excellent. The large number of young horses replacing the old ones, many of which were from 17 to 22 years of age, has placed cavalry organizations in a far better condition for field service than they have been for several years. Notwithstanding this fact, there still remains in many organizations a number of old horses unfit for prolonged field service but entirely satisfactory for garrison work.

* * * * *

Tests of equipment, the preparation, revision and coordination of training regulations, and exhaustive studies on various subjects have kept a volume of work continuously before the Cavalry Board. The more important equipment projects investigated during the year were the following: Semi-automatic rifles to replace the present Springfield, gallery rifles (and a consequent saving in ammunition expenditure); gas masks; gas masks for horses; reconnaissance cars; various packs, and studies on anti-aircraft protection. In addition, many miscellaneous questions were referred to the board.

The Cavalry Corps

THE Cavalry organizations, active and inactive, authorized for the regular Army, are sufficient in number to permit of their organization into a cavalry corps of three cavalry divisions and a separate brigade of three regiments. This cavalry corps organization is authorized for war only and initially for the regular army only.

The troops forming the organic part of the Cavalry Corps will be:

1. Corp headquarters—about 36 officers, 72 enlisted men.
2. Headquarters troop—about 3 officers, 158 enlisted men.
3. Corps Signal troop—about 6 officers, 150 enlisted men.
4. Headquarters field artillery brigade.
5. Three Cavalry divisions.
6. One Cavalry brigade of 3 regiments.

When circumstances so require, the following troops may be attached to

the Cavalry Corps from troops especially assigned or attached to the army for this purpose:

1. One armored car troop.
2. One observation group, air corps, and such additional aviation as may be needed.
3. One regiment of 105 howitzers (horse-drawn).
4. One regiment of 75 pack howitzers (or two regiments in case the horse-drawn 75s of the cavalry division are increased from a battalion to a regiment per division).
5. One battalion of light tanks.
6. One combat engineer regiment (or such part thereof as may be needed).
7. One ordnance company (light maintenance).
8. One medical regiment (or such part thereof as may be needed).
9. One corps train (normally consisting of a train headquarters, 2 wagon companies, 4 pack trains and 12 motor-truck companies).
10. One remount depot.
11. Anti-aircraft artillery.
12. Tracter-drawn field artillery.
13. Portée artillery.
14. Bridge trains (light and heavy).
15. Additional pack trains.

When the particular situation demands the attachment of cavalry to army corps and infantry divisions, the necessary troops can be drawn from the separate brigade of the Cavalry Corps. Cavalry organizations do not form an organic part of army corps or infantry divisions.

If the available regular army cavalry is utilized for the formation of a cavalry corps, there will be no cavalry divisions for the organic cavalry of the 1st (Regular) Field Army. If it is desired to provide army cavalry for this Army, one cavalry division can be withdrawn from the Cavalry Corps for that purpose and still leave an effective cavalry corps. Or, if the situation demands, the Cavalry Corps can cease to function as a corps and all of its divisions can be assigned to armies.

A Cavalryman the National Pistol Champion

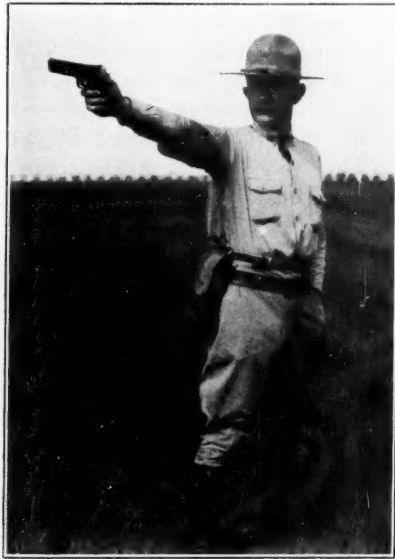
AT Camp Perry, Ohio, this year, First Sergeant Ben H. Harris, Troop A, 1st Machine Gun Squadron, won the National Individual Pistol Championship, with a score of 272 out of a possible 300. Defeating 550 competitors, he gained glory for himself and brought honor to the cavalry service.

Sergeant Harris' accomplishment is the fruit of determination and pluck, plus a vast amount of hard work, for in 1923 he had an uncanny habit of missing the target at 25 yards. Realizing that he was flinching, he set about to overcome this weakness and under the careful supervision of Lieutenant Ireland made rapid progress. Sergeant Harris competed at Camp Bullis that

year but placed second, becoming over-anxious at a critical point in the match. More and more work, and in 1924 he won first place on the Cavalry Team, which sent him to the National Matches at Camp Perry, Ohio. Constant application has brought him distinction.

Sergeant Harris feels that anyone can become a proficient shot, if properly coached and encouraged. Competitions within units, he believes, should be the rule rather than the exception.

On the Organization Day of the 1st Machine Gun Squadron, November 3, General Eltinge, commanding the 1st Cavalry Brigade, presented Sergeant



**First Sergeant Ben H. Harris,
National Pistol Champion**

Harris with a Colt .38 target pistol, officers' model, suitably engraved, a gift from the squadron. Sergeant Harris received the parade, at which commendatory letters from the Chief of Cavalry, and the commanding officers, 1st Cavalry Brigade and 1st Machine Gun Squadron, were read.

Medicine Lodge Pageant

A PAGEANT to celebrate the sixtieth anniversary of the signing of the peace treaty between the United States and the five major Indian tribes of this section was held at Medicine Lodge, Kansas, on October 13, 14, and 15.

Troop F and the regimental band of the 13th Cavalry were directed to participate and, as the cost of rail transportation was prohibitive for such a small city as Medicine Lodge, the trip of three hundred and forty miles was

made by truck. The movement, in seven Class B trucks and one White reconnaissance car was made without difficulty. The superior mobility of the *White* was most useful in selecting the two camp sites en route and permitting a hot meal to be served upon arrival of the Class B's.

Tentage, blank ammunition, and saddle equipment were taken. The authorities of Medicine Lodge secured locally sufficient range horses to mount the command. Despite the untrained horses, the lack of rehearsals, and other unusual conditions (such as the wearing of the old blue uniform and other appurtenances of the old Indian days) the command acquitted itself so well as to receive the official commendation and thanks of the city officials, who stated to the Commandant of the Cavalry School that the deportment and training of the troops created universal favorable sentiment toward the Regular Service.

The pageant depicted the period from before the arrival of Spanish forces, through the taking over of the country by the United States, the trek of the covered wagon trains, the cowboys, etc., down to the present agricultural era. Between four and five hundred Indians from the original five tribes (Choctaws, Cheyennes, Arapahoes, Cherokees, and Crows) were in attendance. One of the most spectacular acts was the relief by the troop of a wagon train of settlers which had been attacked by the Indians.

Reminiscences of the Medicine Lodge Peace Treaties

By GENERAL E. S. GODFREY

The 60th anniversary of the signing of these treaties was celebrated at Medicine Lodge, Kansas, on October 13, 14 and 15, 1927.—Editor's note.

I JOINED my troop, Troop G, 7th Cavalry, Captain Albert Barnitz commanding, at Fort Harker, Kansas, having graduated from West Point the previous June. A few days later Troops D, G and H, Major Joel H. Elliott commanding, were detailed as escort to the Indian Peace Commission.

About three hundred army wagons had been assembled on the south bank of the Smoky Hill River at the crossing of the stage road opposite the site of Old Fort Ellsworth; some timbers of buildings were there, evidence of the site. These wagons were loaded with annuities, or gifts, for the Indians and supplies for the Peace Commission. Also there were four Gatling guns hauled by two mules each, with civilian drivers. Against my wishes I was detailed to command them. I receipted for the guns, mules, harness, etc., to Major Henry Inman, depot quartermaster at Fort Harker.

The only Gatling guns I had ever seen were in the ordnance museum at West Point. My first problem was to get men to man the guns. I finally found two men, one a sergeant, who had served in the field artillery during the Civil War. We three worked out the minimum number of men to man the guns and the necessary number of men were then detailed. My second problem, then, was to improvise a drill to work the guns. On the march I drilled my teamsters.

There were no "howitzers" with this expedition. Ambulances and "Dough-

erty wagons" were sent to Ellsworth City (not Ellis) for the commissioners, and these joined us on the first day's march. On arrival at Fort Zara (Great Bend?), near the mouth of Walnut Creek, nearly all the commissioners left the expedition and went to Fort Larned, where the Indian agency was then located. The next day we camped on the Arkansas River, near the mouth of Pawnee Fork. I well remember our astonishment to find that we could cross the great "Arkansaw" dry shod at some places and find it a running stream above and below.

The next day we were joined by the parties who had gone to Fort Larned, the personnel of the Indian agencies, including guides and interpreters and several officers from Forts Larned and Dodge. I recall that our army mess was increased to *thirteen*! At our midday luncheons a case of (12) canned peaches was opened and there was a drawing of "cuts" for the cans, the successful ones then contributing to the "short cut." Later Major Page and other visiting officers established their own mess.

After crossing the Arkansas River we ascended the sand hills. I rode to the highest hill and there, to my surprise, found the wind had blown out a crater, exposing the top of a tree which, upon examination, I found to be oak. Up to that time we had not seen any buffaloes, but from my high sandhill I could see the rolling prairie to the south and miles and miles of buffalo.

It had occurred to the Indians to drive these herds to that vicinity in anticipation of the assembling for the treaty conference so that their people could prepare their winter supply of dried meat, etc.

That day, while at a halt, an army ambulance drove up to where a group of us were. Lieutenant Tom Wallace called out, "Hello, Satanta!" A bleary-eyed, drunken Indian, wearing the uniform of a colonel, raised up from his bed, looked out from the rear entrance and, not seeing any of his particular friends present, gave a grunt and settled back on his bed. Then the ambulance drove to where the commissioners were grouped.

During the day several of us, including Major Elliott, engaged in "runs" on the buffalo. That aroused the ire of Satanta and he complained to General Harney, the senior of the commissioners present. General Harney sent for Major Elliott and placed him in arrest, but on arrival in camp released him. That stopped our sport. Satanta's complaint was that we killed more buffalo than we needed for food. A number of times at our camps the command had to be turned out to keep stampeding buffalo, for some reason or no reason, from running into our camp and stampeding our stock. They were particularly troublesome on Rattlesnake Creek.

I will remark here that General Sherman, who was chairman of the Peace Treaty Commission, was at *no time* present at this Medicine Lodge conference.

The day we reached the treaty grounds the escort and supply train was halted a couple of miles from the place while the commission and followers went ahead to meet an escort of warriors from the assembled tribes, the Arapahoes, Apaches, Kiowas and Comanches. The Cheyennes had not yet arrived. The commission was received by a vast array of chiefs and warriors

in panoplies with shouts and shooting of firearms and escorted to a large open space near the left bank of Medicine Lodge Creek above the villages.

The escort and wagon train then advanced and on arrival were placed in camp by General Harney, the troops in line facing upstream, officers' tents on the right, above the camp of the commission. My detachment of Gatling guns was camped behind the right of the line facing toward the creek. The supply train was parked behind the commission camp. The commission had two hospital tents facing, with two flies between for the conferences. Daily conferences were held with the chiefs and sub-chiefs or delegations from the various tribes and bands.

Almost daily visits to these conferences left the impression of monotony in the welcomes by the officials and the replies by tribesmen. No doubt, though, that some of the speeches by the chiefs, with their dignified bearing and gestures and well modulated voices, lost much of their eloquence through the monotonous translation by the interpreters. For many years I had the translation of a speech by Chief Satank, that compared favorably with the speech of the Mingo Chief Logan, with which we were familiar in the old McGuffey readers, and ending with the pathetic phrase: "And who shall mourn for Logan? Not one!"

I recall one amusing incident. Kicking Bird, then a sub-chief of the Kiowas, who later became the famous head chief of the tribe, had made his speech and remained standing, but had his gaze fixed on the high silk hat in front of one of the commissioners. The commissioner, not thinking of the hat but that some trinket had attracted his fancy, asked, "What do you want?" Kicking Bird, without changing his gaze, replied, "I want that hat." The commissioner, thinking he wanted to satisfy his curiosity, handed over the hat. Kicking Bird took it and walked away. Later he appeared in the immediate vicinity of the council tents arrayed in moccasins, breech-clout, and the high hat. He stalked back and forth, telling the tribesmen to look at him; that he was "walking in the white man's ways," and using other set phrases that had been used in the councils. Finally he grew tired of his burlesque, set the hat on the ground and used it as a football until he had battered it out of shape, then stalked away.

These councils continued for more than a fortnight, according to my recollection, and there was considerable anxiety because the Cheyennes had not come in, and what would be the attitude of Charlie Bent.

One day word came that the Cheyennes would arrive the next day, but later word that they would camp about three miles upstream for the night and arrive on the morrow. There was serious anxiety as to the meaning of this delay when so near, and that night the guards were instructed to be particularly on the alert.

Stumbling Bear, a sub-chief of the Apaches, became a constant visitor at our camp and became particularly friendly with Major Elliott; he was sure to be there about supper time and got the "leavings" of the supper. He would give us instructions in the sign language. The morning that the Cheyennes

were to arrive, Stumbling Bear came to our camp, but not in his usual jolly mood. He told us to be on our guard when the Cheyennes came in; then went away. As the Cheyennes approached our camp, we could hear occasional shots and shouts. Stumbling Bear and a few of his tribesmen came walking, rather hurriedly and, without a word to anybody, squatted in close vicinity to Major Elliott's tent. All the troops had instructions what to do in case of demonstration of hostile intent, and stood in front of their tents with everything in readiness to jump to their places fully equipped for dismounted defense.

The nearer the Cheyennes approached, the more demonstrative they became. Shooting, shouting, and blowing of trumpets; of the latter they had two or three. When about two or three hundred yards from our camp they gave several loud shouts and dispersed.

Stumbling Bear and his followers left in high good humor. A year later, November 27, 1868, at the Battle of Washita, Major Elliott was killed. In January, 1869, the Apache tribe came to their agency at Fort Sill. Stumbling Bear came to see me. I noticed that he had his hair cut off, and there were other unmistakable signs of mourning. I asked him if he was in mourning for losses in his band or family. He replied, "No," and gave me to understand that he was in mourning for the loss of his good friend, Major Elliott. I never saw him again.

The conferences were closed soon after the arrival of the Cheyennes, the treaties signed ("touching the pen") and then the wagons were unloaded and gifts of supplies were distributed—food, tobacco, clothing, blankets, pots, kettles, skilllets, trinkets, etc.

When we left there, the plain where the commission had camped was strewn with the despised, left-over, shoddy Civil War uniforms, issued by the bale to them.

At Fort Larned, Kansas, these same tribes were assembled in August, 1868 (less than a year after signing the treaties), to receive the annuities promised by the treaties. The *next day* after the issuance of these annuities, as if concerted, warriors of these same tribes attacked the frontier settlements in the Saline, Soloman and Republican valleys, killed men, women and children, outraged and made captive women, burned homes, and stole stock.

The outcries of consternation and indignation, with protests for protection, resulted in the Winter Campaign of 1868 and nine others under General Sheridan, including the attack, capture and destruction of Black Kettle's village of the Cheyennes by the Seventh Cavalry, under the command of General Custer, who later rescued two of the captive white women (Mrs. Morgan and Miss White).

Then these tribes went on their agreed reservations and for some years there *was* peace!



MOUNTED SPORTS

First Cavalry Division Horse Show

By MAJ. STEPHEN M. WALMSLEY

Signal Officer, First Cavalry Division

SIXTH Annual First Cavalry Division Horse Show. I'd like to see the sixteenth and the sixtieth! I feel about the First Cavalry Division Horse Shows the way Frank Tinney said that he felt about women's skirts in one of his monologues of some years ago. He remarked that "He had noticed that women's skirts were getting shorter every year, and that he hoped he would live a few more years, *anyhow!*"

It is not that each successive show held at Fort Bliss is better in every respect than the one which preceded it, for horses and riders come and go, even in as short a period as the three years during which I have observed the shows, but that each year shows an improvement in the general standard and brings forth some new feature in exhibits, ring appointments or organization.

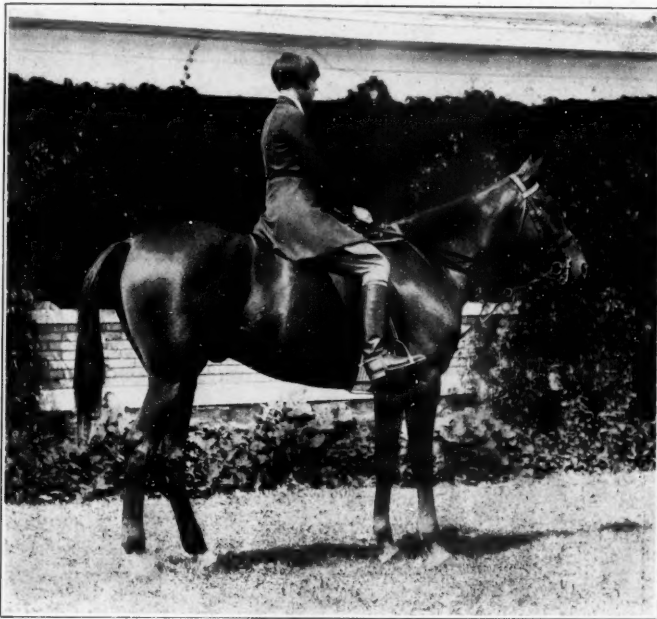
The show this year was favored with perfect weather, and for the first time in the history of these annual events, the entrants performed in a turf ring instead of on yellow gravel. At the close of last year's show it was decided that the exhibition was entitled to a better setting than had been previously available, and work was immediately begun on the improvement of the Howze Stadium, where the shows are held.

The list of animals entered this year, which mounted to a figure approaching five hundred, was materially smaller than that last year, due to the eliminations, which were held in practically all the jumping classes prior to the show. This innovation in the method of handling the Fort Bliss shows added materially to the interest from the spectators' standpoint, as it brought down to a reasonable figure the list of entrants in the jumping events. Classes for novice jumpers and for novice jumpers and riders were included this year for the

first time, and replaced the open enlisted man's jumping class, which last year called forth so many entrants as to be monotonously long.

With the two jumping classes mentioned above, the open jumping and the championship jumping for all winners in jumping classes, ample opportunity was provided for all officers and enlisted men who were capable of good performances. These arrangements also made it possible for ladies to compete in the important jumping events.

Last year the First Cavalry Brigade, whose headquarters is at Fort Clark, Texas, presented a handsome trophy to the division, to be contested for annually by all units within the division. The events scored for this trophy were selected by a division board and included only those which could be properly entered by all division units, care being taken to exclude any classes requiring



Bones, Miss Helen Tillson up

equipment or vehicles not common to all, and also classes requiring animals or heavy equipment, the cost of shipment of which from the outlying stations to Fort Bliss was too large to be warranted. The winning of this cup provides a form of team competition as against individual competition, which adds materially to the interest of the show. The Fifth Cavalry won the trophy this year, with a total of twenty-three points, as against twenty points earned by the Eighth Cavalry, nineteen points by the First Cavalry, and eleven points by the Seventh Cavalry. The show was made up of forty-one classes, which gave an opportunity for showing every type of animal, animal drawn vehicle, and pack equipment used by the division.

In addition to the strictly military events, there were classes for polo ponies, hunters, hacks, both singly and in pairs, and a children's class.

The outstanding horse of the show was a chestnut thoroughbred, *Bones*, owned and ridden by Major J. C. F. Tillson, Jr., Eighth Cavalry. *Bones* took the blue ribbon in the remount cup event and in the open jumping, the red ribbon in the officers' charger class, and the yellow in the classes for novice jumpers, championship jumpers, lightweight hunters, and officers' private mounts. *Bones* is a Texas product, son of *Sir Ballinger*, and was bred and raised near San Angelo, Texas.

The polo pony classes were especially good this year. Capt. B. C. Bridges, V. C., was the most successful exhibitor, taking first place in the group of three ponies' class, showing *Harry*, *Naomi*, and *Lulu*. He also won a red in the heavyweight class, another red in the suitable to become polo ponies class, and a white in the lightweight class. The polo pony classes as a whole formed an interesting study from the standpoint of comparison between Government owned ponies and privately owned ponies. Excluding the classes which were performance solely, such as the bending race and stake race, and classes for stables showing twelve polo ponies in a group, there were one hundred and seven ponies shown in groups of three, lightweight ponies, heavyweight ponies and ponies suitable to become polo mounts. Of these animals, fifty-seven were Government owned and fifty privately owned. In the four classes mentioned above, all the ribbons in the groups of three ponies went to privately owned animals, all the ribbons in the ponies suitable to become polo mounts went to privately owned animals, and first and second ribbons in the lightweight polo mounts did likewise. In the heavyweight class, Government owned ponies made a clean sweep and took third and fourth in the lightweight class.

The jumping classes, although very good, missed *Woodrow* and *Garry Owen*, two sterling performers who have graced the Fort Bliss show for a number of years past. Both of these animals went to Fort Riley last spring for the Olympia tryouts and have gained fame for themselves and the service this fall in eastern shows, especially at the Garden and at the Cathedral show at Rye, New York. Two traditional performers, *Rebel* and *Peanuts*, whose list of winnings is far longer than their pedigrees, failed to successfully compete with their younger rivals this year, and it is evident and not surprising that their winning days are past.

Among the ladies, Mrs. Charlton of Fort Sam Houston; Mrs. Darling from the First Cavalry, and Mrs. Creed from the Fifth Cavalry, were outstanding. Mrs. Charlton's win in the heavyweight hunter class on *Louis XIV* was well earned by a beautiful performance. The field against which she competed was large and contained excellent animals and riders. In the jumping, which formed a part of the performance for the class, she was one of the few who negotiated the course at a true hunting pace.

The officers' charger class and the officers' private mounts class were won by Col. Conrad Babcock, riding his big mare *Latonia*. Both these classes included a jumping course and a schooling exhibition, and Col. Babcock showed

his mount throughout both classes in a manner extremely befitting the commanding officer of a cavalry regiment.

The dates of the show, November 8, 10 and 12, were less than a month after the return of the entire division from its extensive maneuvers in the Marfa area. As these maneuvers had prohibited any preparation for the show prior to their conclusion, the excellence of the classes were especially noteworthy.

The Army Polo Team in the High Goal Tournaments, 1927

By CAPTAIN C. H. GERHARDT, *Cavalry*

FOR the first time, in 1927, the Army Polo authorities felt that they had the required player and pony personnel to enter in the high goal tournament held at Meadowbrook after the Internationals. These two tournaments consist of the Open, played on the flat, and the Monty Waterbury, played on the handicap basis. The following is the line-up and designation of the various teams entered:

Team	(1)	(2)	(3)	(Back)
Maggie	Morgan Belmont	Watson Webb	Jerry Balding	Devereux Milburn
Eastcott	Mr. Schwartz	Mr. Hopping, Sr.	Mr. Hopping, Jr.	Mr. Trail
Hurricanes	Laddie Sanford	Winston Guest	Capt. Roark	Maj. Harrison
Sands Point	Mr. Harriman	Tommy Hitchcock	Cheever Cowdin	Mr. Stoddard
Ramblers	Sonny Whitney	Capt. Pert	Malcom Stevenson	Bobby Strawbridge
British Army	Capt. George	Capt. Denning	Maj. Atkinson	Lieut. Guinness
U. S. Army	Capt. Wilkinson	Capt. Gerhardt	Capt. Rodes	Capt. Huthsteiner

The highest of these teams was rated at 31 goals, our Army Team being the lowest at 21. However, a ruling was passed that no team should give away more than 5 goals in any game, and therefore our Army Team entered at 26 goals.

Due to the efforts of Captain Rodes, extra ponies were secured to augment our strength for these two tournaments, notably, *Tranquil*, loaned by Mr. J. C. Cooley, *Tip Top*, *Last Choice* and *Babe Coeurs* from Fort Riley, and others. The team was outmounted as a whole; however, there were several outstanding ponies for the various positions. Captain Wilkinson had *Peg*, a veteran of the last two military series with Great Britain; Captain Gerhardt had *Tranquil* and *Tip Top*; Captain Rodes had *Chicken*, *Liggett* and *Babe Coeurs*, while Captain Huthsteiner had an even lot of ponies, none of them outstanding.

In the draw for the Open, the Army drew a bye for the first round, and in the second round played the Ramblers, who had Mike Stevenson and Bobby Strawbridge at No. 3 and Back. This, of course, was a very fine defensive combination but, by hard riding and good team play, the Army came through in a driving finish by a score of 6 to 5, scoring two goals in the last period. This put the team in the semi-finals and, when the British Army won its way to the finals, most of the polo enthusiasts were hoping that our team would win its match, thus making the finals for the Open Championship an all-army event. However, things did not turn out this way. With Tommy

Hitchcock at his best, mounted on three of the ponies he had played in the Internationals, the Sands Point team defeated the Army by 10 to 7. Hitchcock scored 7 of these goals and played a beautiful game. Considering the fact that this was a 31 goal team and the Army a 21 goal team, everyone was very well pleased with the showing. Sands Point went on to win the Open Championship by defeating the British Army in the finals.

The Monty Waterbury tournament was played on the handicap basis. For the first game, the Army drew Laddy Sanford's Hurricanes. This Hur-



Chicken

Showing Extreme Development of Hindquarters and Remarkable Handiness

ricanes team was beautifully mounted throughout. It was a high goal team, carrying a handicap of 31. Thus, the Army received a 5 goal advantage to start with. The final score of this game was 11 to 10, in favor of the Hurricanes. Captain Huthsteiner had a bad fall in the 5th period, but played on until the 7th, when he had to be relieved by Captain Tate. Later, we felt that, if a substitution had been made in the 5th period, our team probably would have come by this match a winner. However, it was probably just as well, as the ponies were pretty well played out and several of them would not have been able to go on.

One of the outstanding achievements of the Army this year was the

winning of the Prince Friarstown Cup by the Army Polo mare, *Chicken*. This Cup is presented annually by Mrs. Averill Harriman to the best playing mare in these high goal tournaments, which is also suitable to become a brood mare. *Chicken* won the middle-weight brood mare class in the Annual Pony Show and played so well for Captain Rodes that she was selected for this Cup.

Due to the kindness of the authorities at Fort Hamilton, the Army team shipped down, the last Sunday in September, to play an exhibition polo match on the Fort Hamilton field. A large crowd of about five thousand turned out for this match, and the receipts were donated to the Army polo fund. Several days later, the Government ponies were shipped to Front Royal, Virginia, where they annually winter, and the team broke up for the season of 1927.

Mr. Stoddard, President of the Polo Association, expressed himself as being very much behind the Army's effort to retain the Military Championship next year, when the British Army comes to this country to play, and will do all in his power to further this end. The Army owes a great deal of thanks to the Polo Association, and principally to Mr. Stoddard, Mr. Milburn and Mr. Hitchcock, Sr., not only for their advice and help, but for the use of the Meadowbrook Fields and also the private fields belonging to Mr. Russell Grace, Mr. Harold Talbot, Mr. Phipps, Mr. Fred Post and the Sands Point Club.

Chattanooga-6th Cavalry Horse Show

THE annual Chattanooga-6th Cavalry Horse Show was held at the post November 11 and 12. Following last year's show, the show grounds on McDonald Field in Chickamauga Park were subjected to many changes and improvements. A hedge has been planted around the entire ring and a stone wall built along the west side of the ring to accommodate the additional number of boxes which it was found would be required for future shows.

The show was started at 10:30 A. M., Friday, when the 6th Cavalry polo team, composed of Captains Cheves and Meador and Lieutenants Ireland and Ladue, with Lieutenant Comfort, substitute, lined up against the Infantry School team, composed of Majors Smith and Lyman, Captains McClure, Burris and Forsyth and Lieutenant Guernsey, for the first of a three-game series. The teams were to play the best two out of three games. The first game was played on a wet field, but that fact did not appear to detract from the speed or enthusiasm of either the players or the spectators. During the early part of the game each team played fast even polo which continued until the half, when the 6th Cavalry had gained a slight advantage which was held during the remainder of the game. The final whistle ending the game found the 6th leading by the score of 9 to 7.

At 1:00 P. M., the horse show opened in the show ring and the spectators' attention was drawn from polo to other forms of equine exhibition. The show was fortunate in having Mr. C. C. Harris of Lexington, Kentucky, to judge the three and five-gaited classes. Captain McKinley, Remount Service, Quartermaster Corps, and Captain Renn Lawrence, Cavalry, D. O. L., judged military, jumping and polo classes.

In addition to the local civilian and military entries, we were hosts to a team of officers and ladies from the Infantry School. In addition to the polo games played, the Infantry officers and ladies participated in practically all of the classes in the horse show. The visitors exhibited some excellent horsemanship and received a large share of the prizes and ribbons awarded, winning fifteen ribbons, five each of blue, red and yellow. All of the classes open only to civilians were well filled and afforded many excellent and interesting exhibitions of profound interest to the spectators.

An exhibition ride was given each afternoon by the ladies of the post, Chattanooga and vicinity. One of the most sought after prizes is the Garnett Andrews Challenge Cup, which was won this year by Mrs. Leslie D. Carter, riding *Jazzo*. This cup is donated by Mr. Garnett Andrews of Chattanooga and is awarded annually to the best lady rider in the regiment. The conditions of the competition include the ability of the rider to demonstrate training of her mount in the ordinary schooling movements and finally to conduct the horse over a course of four jumps. One of the outstanding features of this year's competition was the fact that Mrs. Carter has twice won the cup before and, after not competing last year, came back this year and won over a field of six. Miss Mary Cootes was second and Mrs. R. E. Ireland, third.

In jumping, competition was very close and in several of the classes, jump-offs were necessary to decide the winners of the prizes. *Red* and *Bony* made their usual performances and in the classes entered carried off their share of the ribbons and prizes.

The championships in the three and five-gaited classes were held on Saturday afternoon. These classes were open to all who had won first or second in any three or five-gaited class in the show. Miss Wiseman on *Rex Allen* was awarded the blue in the five-gaited and Lieutenant Comfort on his private mount, *Windy*, received the award in the three-gaited class.

The final polo game was played Sunday afternoon. The field was much improved and a fast game was promised. The final chukker started with the score a tie. With the throw-in, the 6th Cavalry carried the attack with a rush and scored twice, quickly followed by a tally for the Infantry. The spectators were being treated to a real finish and before the final whistle sounded the 6th had again driven the ball between the goal posts for their third point of the chukker. The game ended with the score 10 to 7 favor the 6th, for their second straight victory of the series.

The success of the show was due largely to the many friends of the post in Chattanooga and vicinity, who responded nobly to every request for assistance in putting the show over and making it the success it was.

Troop Horse Show in the Philippines

TROOP G, 26th Cavalry (PS), held its First Annual Horseshow on September 15, 1927. Inasmuch as this was the first troop horseshow that has been held in the 26th Cavalry since the organization of the regiment, it may be of interest to learn what the Filipino cavalryman is capable of.

Prior to 1927, the jumping done by enlisted men, with a few exceptions, had been confined to small, natural obstacles, such as ditches and logs. Consequently, men and horses alike were not prepared to perform creditably without considerable practice.

Immediately after the completion of the target season in June, a jumping chute was constructed in rear of the stables. This chute contained a stone wall, a chicken coop, and a solid post and rail jump, all of which were about three feet high. For a period of about six weeks, fifteen or twenty of the best horses in the troop were put through this chute once each day. In the meantime, permission and support for the show were assured and a date was tentatively set. After the first six weeks all men who desired were allowed to ride their horses through the chute, and for three Sundays preceding the show a regular course of jumps was taken.

There were seven classes, as follows: Privates' jumping, best mount and schooling, non-commissioned officers' jumping, best mount and schooling and open jumping.

In all jumping classes, there were five jumps, four around the outside of the course and one in the center. Each contestant rode twice around the outside and then down the center. The first jump was a brush about three feet three inches high, the second a post and rail three feet high, the third a stone wall with a bar on top three feet ten inches high, the fourth a gate three feet high, and in the center was a triple bar three feet high. The bar was placed on top of the stone wall to make the horses clear the solid part of the jump and to avoid bad falls.

The privates' jumping was won by Private Alejo Sambrano with a perfect score. The winners of second and third places had scores of 99 and 98, respectively. There were ten entries. For the non-commissioned officers' jumping the post and rail, and triple bar jumps were raised three inches. There were five entries. First place was won by Sergeant Proceso Oizon, riding a remount received from the States on the *Meigs* in February. The scores of the three placing entries were 97, 95½, and 92.

There were eight entries in the best privates' mount class, which was won by Private First Class Luciano Saveliana. Non-commissioned officers' best mount, with four entries, was won by Corporal Pablo Hernandez.

There were four entries in both schooling for privates and non-commissioned officers. Private First Class Saveliana was winner of the former and First Sergeant Saturnino Javier of the latter. Private Saveliana's performance is remarkable due to his conformation. He is the shortest man in the troop and in mounting his horse invariably jumps for the stirrup. When in the stirrups his feet do not come below the line of his horse's belly. First Sergeant Javier rode a remount received in February.

For the open jumping, the post and rail jump was raised to three feet six inches, and it was so arranged that there were only two bars very close together at the top. The triple bar was also raised to three feet six inches. Private Sambrano won this class and the Jumping Championship with a score

of 94½. Four entries were tied for third and, as it was late in the morning, the place was awarded by lot. There were six entries and the scores were from 94½ to 92½. Private Sambrano's performance is worthy of note, when it is realized that he rode his horse in four classes and that the horse itself was comparatively old and hitherto unknown.

The results of the show were very gratifying and prove that the Filipino soldier, although not a horseman by nature, is capable of schooling and jumping and, given a fair amount of training, can put up an excellent performance.

Troop G is commanded by Captain W. F. Pride, with First Lieutenant W. S. Conrow as second-in-command.

Hand Polo

THE game of hand polo, as developed by Colonel J. R. Lindsey and Lieutenant J. H. Walker of the 14th Cavalry at Fort Des Moines, Iowa, has opened a new field of riding hall exercise and is meeting with great success and popularity among the troopers of the 14th Cavalry at that station. The game is not only simple to learn, but it is extremely interesting and fast. The game is yet in its infancy. Colonel Lindsey would be pleased to receive suggestions for changes or additions to the rules, which are as follows:

Teams: The game of hand polo is played by two mounted teams consisting of five men each.

Equipment: Snaffle bits, blankets and surcingles, indoor baseball.

The Game: The teams shall line up in the center of the field in column of trooper at right angles to the length of the field. The ball is thrown in by the referee between the two teams to put it in play. The object of each team is to gain and keep control of the ball and to score goals, and to prevent their opponents from gaining control of the ball and scoring. A game is divided into four periods of seven minutes each.

Rules: 1. The goal shall be a board, four feet by four feet square, one being placed at each end of the playing field in the center of the end lines and twelve feet above the level of the playing field. A goal shall be scored when the ball, thrown by a player, strikes the goal board.

2. The ball may be carried only one-fourth the distance of the playing field by any one player. It must then be passed. It may be carried a shorter distance and then passed.

3. An opponent may ride out the player carrying the ball or the player about to receive the ball to prevent the pass or to gain control of the ball.

4. Riding across the head of an opponent's pony or using elbows shall constitute a foul.

5. If the ball be dropped, any player may dismount and regain it and the ball continues in play. The ball may not be passed to a mounted player by a dismounted player; and a player who has dismounted to recover the ball must not carry the ball more than five yards. A dismounted player who has recovered the ball and who is unable to regain his mount in five yards or less, must drop the ball.

6. A ball passed or thrown out of bounds shall be thrown in again by the opponents at the point where it passed out of bounds.

7. After each goal scored, the play shall commence again by the ball being thrown in again in the center of the field.

8. A ball shall not be passed from hand to hand but must be passed by a throw.

9. A field goal shall count two points; and a goal from a free throw shall count one point.

Penalties: A free throw from the quarter line for the side fouled. Players may be located any place on the playing field during a free throw, but shall not interfere with the player making the throw. Fouls and violations of the rules shall be penalized.

Officials: Referee, time keeper and scorer.

While the above rules pertain to the game as played in the riding hall, the game can be developed and made suitable for outdoor play, assuming the same characteristics as polo, using the same horses and equipment and following the game closely in all respects save that the ball is passed and carried instead of being knocked with a mallet.

1st Cavalry Division Polo Tournament

THE winning of the 1st Cavalry Division Polo tournament by both the senior and junior teams of the 7th Cavalry was an accomplishment which reflects great credit on the sporting, fighting and playing ability of Major Terry Allen. Undaunted by the success of the excellent team which represented the 8th Cavalry and Fort Bliss in the inter-circuit tournament and with a handicap of three goals when he lined up against them, Major Allen led the 7th Cavalry to victory by the score of 15 to 8. The pace set in the beginning of the game was a hot one and one team had to break. With the score 5-5 in the 3d period it looked bad for the 7th, when their strong back, Captain C. L. Stafford, was forced to retire from the game as a result of a bad fall. Captain Harry Dodge replaced him and no let-up in the offensive spirit of the team was noticeable. In fact it improved and at the end of the 6th period there was not much doubt as to the outcome of the game. The 1st Cavalry in the finals played a plucky game but their opponents were too strong for them. The 7th won by score of 16-8. The other members of the team were Captain T. E. Voigt and Lieutenant M. McD. Jones.

The junior team defeated the 1st Cavalry by the score of 6-3 and finally won the series by defeating the 82d Field Artillery by the score of 7-4. The team consisted of Lieutenants S. W. Van Metre, J. A. Whelan and Z. W. Moores and Captain H. L. Branson, in that order from front to rear.

Fall Horse Show Record of the 305th Cavalry

THE horse show team of the 305th Cavalry (Pennsylvania), Col. W. I. Forbes commanding, which entered the Wissahichon Horse Show on September 17, 18 and 19, was composed of the regimental executive officer, Captains Brogden and Livingston, Lieutenants Fotterall, Taylor and Town, and First Sergeant Stradley. The 305th entered eight horses in all the military events and had entries in practically all the jumping classes, making a total of sixty-three 305th Cavalry entries at the show. The regiment won all the military

classes, taking first, second, third and fourth places in each class. The following prizes were added to the regimental trophy case as a result of this show: five beautiful trophies, five blue ribbons, nine red, six yellows, and seven white. The excellent riding of First Sergeant Stradley in this show is worthy of mention.

At the Montgomery Hunt Club Show on October 12 the regiment had entries in all the military events. Lieutenant Town on *Liberty Bond* won the cup and blue ribbon in the military jumping over the outside course. Lieutenant Fotterall was second and Lieutenant Mitchell fourth in this event. In the military jumping on the inside course Lieutenant Fotterall was first and Lieutenant Mitchell fourth. In the saddle class Lieutenant Mitchell won the cup and blue ribbon. In the Championship Hunter Class Lieutenant Town took the red ribbon.

The regiment was also well represented at the Whiteland's Horse Show on October 29. In the Hunt Team Class the regimental entry, composed of Major Thompson and Lieutenants Town and Taylor, took second place. In the members' jumping class Lieutenant Fotterall took second place and Lieutenant Taylor third place in a field of twenty-three entries. Lieutenant Fotterall again took second place and also fourth place in the open jumping class in the Memorial Plate Steeplechase. The regiment had entries in all the jumping events and members of the regiment rode in all the flat races and steeplechases.

2d Cavalry Polo Season

THE 2d Cavalry polo team, consisting of Major E. L. Franklin, No. 1, Lieutenant J. W. Wofford, No. 2, Lieutenant Colonel J. K. Herr, No. 3, and Captain J. C. Rogers, No. 4, won the right to represent Fort Riley at the Ponca City Tournament, September 20 to October 7 by defeating Colonel Gordon Johnston's Blue team in two matches; 12-3 and 8-6. Other teams playing at Ponca City were Kansas City, Wichita, Oklahoma University, Fort Reno, Ponca City Reds, Ponca City Blues, Houston and Fort Leavenworth. The 2d Cavalry team won its way to the finals by defeating the Ponca City Reds 14-10, and Fort Leavenworth 13-9. The Fort Leavenworth team was the same that won the Fort Snelling tournament by defeating Onwentsia in the finals. It consisted of Majors Swift and C. C. Smith, Captain Fiske, and Lieutenant Holbrook.

The 2d Cavalry lost the finals to the Ponca City Blues by a score of 8-4. This team consisted of Messrs. Marland, Crawford, Shallenberger and Allen. The 2d Cavalry was obliged to give this team 4 goals by handicap.

Ponca City is developing into quite a polo and riding center, under the guidance of Don Henderson and the liberal aid of Mr. E. W. Marland. The ponies are distinctly high class and the players rate above their present handicaps. The visit of the 2d Cavalry team was made enjoyable, not only by the cordial hospitality of Ponca City hosts, but also in the observance of sound methods by means of which horsemanship and polo are promoted. It seems

that Mr. Marland, the oil king, is far sighted enough to believe that aside from the matter of sport, the dividends in health and efficiency to his officials and employees resulting from the time spent on a horse warrants his strong support of all mounted activities.

The team next took part in the Wichita tournament, with same personnel playing, except that Colonel Herr returned to the regiment. The team went to the finals, but lost to Ponca City by a score of 8-7.

Taken as a whole, the season was successful. Although it was obvious that other teams had better ponies, we made up for the difference as best we could by taking the best of care of the mounts that we had. The care of our ponies counted heavily in the scores made, and we hope to acquire more and better ponies for next season.

The Cavalry School Hunt Club

THE hunting season opened October 23. With the pack improved by considerable new blood and with fifteen couple of this season's puppies to be ready to hunt in the early spring, three or four hunts a week are being scheduled. In addition to Sunday and Wednesday hunts for club members, a hunt for enlisted men is held each Friday, with the several units alternating, and some additional runs are being arranged for the student officers' classes. The first party of the season was held on the Wednesday afternoon before Thanksgiving, when refreshments were served at the Bridge Tea Rooms following the kill. A field of fifty followed the pack twice through Hill Pasture over five fences, through Magazine Canyon and down Cemetery slide to the kill at the concrete bridge. A large number of officers have applied to have their private mounts qualified as hunters under the rules of the National Steeplechase and Hunts Association, of which this club is a member. The pack is working better this year than at any time in the past four years and will compare favorably with any pack in the country.

Presidio of Monterey Polo Team

A POLO team picked to represent the Presidio of Monterey, competed at Vancouver Barracks, Washington, in September in the 9th Corps Area tournament and the Open Championship tournament. It was decided to send a post team representing the 11th Cavalry and the 2d Battalion, 76th Field Artillery. The team not only won the Corps Area championship, but also won the open tournament, being victors in every game it played.

The team consisted of Lieutenant McNair, 76th Field Artillery, at No. 1; Lieutenant Barden, 76th Field Artillery, at No. 2; Lieutenant Read, 11th Cavalry, at No. 3; Major Erwin, 11th Cavalry, at back. Major Erwin and Lieutenant Read played on the 11th Cavalry team which won the Pacific Coast circuit tournament in 1926.

The Presidio team also won places in the horse show, which was held in connection with the polo tournament. Major Erwin won the open jumping match; Lieutenant Read came off first in the polo pony jumping, with Major

Erwin second; and Captain Lambert, who was substituting on the polo team, got first place in the one-quarter mile race. *Rex*, owned by Major Erwin and ridden by Mrs. Clinton, won first place in the walk, trot, and canter ladies' class, and *Brownie*, owned by Major Erwin and ridden by Mrs. Harris, got second place.

Cadet Polo at West Point

By CAPTAIN C. H. GERHARDT, *Cavalry*

CADET polo this year has been put on a somewhat different basis from that of previous years. A decided effort has been made to make this a corps activity, rather than a first-class privilege; and, although we may not do particularly well in the intercollegiates this year, it will make for better polo teams in the future. There are three polo squads being handled at present; the "A" squad of nine players, the "B" squad of nine players, and the "C" squad of promising fourth-classmen. At present the first team consists of Cadet Brown, the polo captain, at No. 1; Cadet Harkins, second class, at No. 2, and Cadet Haskell, third class, at No. 3. So far this team has demonstrated its superiority over all other combinations, and the chief advantage is that only one man will be lost this year. As we go on, more and more underclassmen will be added to the various squads, and no upper classman will be kept unless he has an opportunity to play on the first team. An officers' team, consisting of Lieutenant Jadwin, Captain Cole and Captain Gerhardt, furnishes the Cadet team opposition each week and, although the cadets are outclassed at present, they are improving steadily.

New ponies have been shipped up from Front Royal and will start to work under Lieutenant Jadwin, who has charge of the cadet remount platoon.

General Winans, the new superintendent, is particularly keen on cadet riding activities, and we hope he will be able to do something to further the new polo field.

114th Cavalry Night Ride

OFFICERS of the 114th Cavalry experienced their first regimental night ride on the night of August 22, during the summer encampment at Camp Whitside, Fort Riley.

Responsibility for this experience has been placed vicariously on Colonel W. K. Herndon, on Major Clark P. Chandler, senior instructor, and on Captain John Smith, plans and training officer. Responsibility for the weather, however, has been definitely placed on Captain Smith. It rained. More than that, it stormed. There was lightning and there was wind, and both wind and rain were cold. Aside from that combination, the ride was an excellent one.

The course was approximately 25 miles, and was laid along the boundaries of the reservation. Officers started in pairs, as is the custom, but rode quite often in flocks, for safety and companionship. Home station was Headquarters, Camp Whitside. Station "A" was at the flagstaff on Morris Hill;

"B" at Haycamp, "C" at Milford Gate, "D" at Estes Gate, "E" at North Gate, "F" at a designated road bend north of Ogden, and "G" at the bridge over Three Mile Creek on the Golden Belt highway.

With plans for the ride well laid and the weather threatening, Colonel Herndon of the 114th very kindly extended to the officers of the 113th, encamped on Republican Flats, an invitation to join in the ride. Colonel Findley promptly accepted the invitation for his regiment, and ordered participation of all his officers. That may have been what started the storm. At any rate the officers of the 113th rode the same route, starting at their camp, and making Milford Gate their first station clockwise, and Hay Camp the first station counter-clockwise.

There were various incidents and particulars of the ride which, in the name of thoroughness, must be reported. For one, Colonel Herndon, riding with his adjutant, Captain Charles W. Gordon, attempted to beat the system, left the well-defined roads and came to grief in a pen of bulls. Both the Colonel and the bulls were disgusted, but the Colonel waived the point and withdrew. But for lack of pontoon equipment for his mount, and aquatic skill on his own part, Colonel Findley might have been the winner. Several hip-high fords on the route cut the Iowa colonel's time seriously.

The statistical meat of the affair is this: Best time was recorded by Captain George H. Olmsted, adjutant of the 113th and Captain Whitmore of Troop F, who booted their mounts over the route in only a little more than three hours. For the 114th, the winning team was composed of Captain J. S. Turner of the Service Troop, and Lt. Eugene Bush of A Troop, with elapsed time of four hours 15 minutes. Twelve of the sixteen teams of the 114th reported at all stations and qualified as finishing the ride. All mounts were reported at the Colonel's tent at 7 o'clock on the morning of August 23, fit for service. And performed it.

Cavalry School Horse Show Team at Wichita and Kansas City

A HORSE show team from the Advanced Equitation Class, consisting of Captains Morris, Cannon and Carson and Lieutenant Hodes and led by Captain Bauskette, made the Wichita and Kansas City Horse Shows during November. Mrs. Sancomb accompanied the team to both shows, and Mrs. Hyde of Wichita rode with the team at the latter place. The team took eight firsts, eight seconds, ten thirds and eight fourths at the two shows in nineteen classes entered. The most important classes won at Wichita were the \$500 stake for jumpers, won by *Monte Carlo*, Lieutenant Hodes up; hunters and jumpers, open, won by *Joffre*, Mrs. Sancomb up; touch and out, won by *Joffre*, Mrs. Sancomb up. At the American Royal Horse Show, Kansas City, the important winnings were: Jumpers, four foot six inches, won by *Monte Carlo*, Lieut. Hodes up; pairs of hunters, won by *George Williams* and *Gedney*, Captains Carson and Morris up; novice hunters, won by *George Williams*, Captain Carson up. *Dynamite*, a Cavalry School horse taken to the American Royal by the 2d Cavalry and ridden by Mrs. Febiger, placed first in four

jumping classes. This is the horse that made such a spectacular fall during the filming of the picture "The Life o' Riley" that that portion of the film was cut out. What may have appeared to be a fatal accident has not affected the ability of this great horse.

Polo at Fort Brown, Texas

THE opening of the 1927-1928 polo season found both the Fort Ringgold and Fort Brown Polo Associations rather low in funds, but with the strong desire for polo. Undismayed, the regimental commander proposed that the Fort Ringgold ponies be led to Fort Brown to reduce expenses, to which the 2d Squadron Commander at Fort Ringgold heartily acceded.

The opening game of the series was played on October 16, Fort Brown winning over Fort Ringgold with a score of 7 to 4 (1 goal by handicap). In the second game of the series, played on October 19, Fort Ringgold scored 3 goals (1 by handicap), Fort Brown running up the winning score of 6. The final game on October 22 resulted in a victory for Fort Ringgold by a score of 6 (1 by handicap) to 5 after an extra period of play.

The large attendance at the games insures support of the Annual Mid-Winter Tournament to be held at Fort Brown, January 4 to 15, to which definite acceptances have already been received from the "Huisaches" and "Freebooters" (teams from the Houston Riding and Polo Club) and from Campwood, Texas. The Mid-Winter Tournament, first established in January, 1927, as an annual affair, gives promise of becoming the principal sporting and social event of the Rio Grande Valley.

Hunting With the 307th Cavalry

THE Deep Run Hunt of Richmond is holding a drag hunt every Saturday afternoon. Jumps are stiff post and rail, varied by an occasional bank or stone wall. The regimental commander, Colonel Earnest, is Chairman of the Hunt Committee, and several other officers of the regiment are members. Any officer of the division who may be in Richmond is cordially invited to hunt. Just let us know at headquarters.

OTHER ACTIVITIES

The 4th Cavalry Presidential Guard

ORDERS were received on May 31, 1927, to establish a model camp at the State Game Lodge, South Dakota State Park, and to furnish the guard for the President of the United States during his summer vacation in the Black Hills.

Work was commenced at once. Some difficulties were encountered, due partly to lack of funds and material but, through the help and cooperation of the War Department, the 7th Corps Area and Fort Meade, these difficulties

were overcome and the camp completed in ample time for the President's arrival.

The camp was located one-half mile from the lodge and about five hundred yards from the main highway, necessitating the building of a corduroy road over a ploughed field. This road was built by utilizing old logs and railroad ties found in the vicinity. Both the road and the camp itself were constructed for the most part by the personnel of the guard.

The camp was ideally located, bordering on a creek, with splendid drainage facilities. Electric light was supplied by a plant made up by members of the guard. The dynamo was loaned by the State Sanitarium at Senator, S. D., and power was supplied by an old automobile motor loaned by a Custer, S. D., garage, put in shape and installed by a member of the guard. The plant functioned perfectly throughout the duration of the camp, supplying light for every tent and electric current for the operation of hospital apparatus. Water for the use of the camp was piped from the State Game Lodge.

The Presidential party arrived on June 15, 1927. Colonel Winship, the President's Aide-de-Camp, and Major Coupal, the President's physician, were most kind in giving every possible assistance and support to the commander of the guard in the way of advice and suggestions.

The personnel of the guard was furnished entirely by the 4th Cavalry and staff detachments from Fort Meade, S. D. The original strength was fifty men, which was subsequently increased. The officers assigned to detail were as follows: Captain Rohland A. Isker, First Lieutenant W. R. Mobley, Second Lieutenant John O. Murtaugh, all 4th Cavalry, and Major Wm. H. Hall, M. C., Camp Surgeon.

The duties required of the guard were various. In addition to furnishing the guard at the State Game Lodge during the President's stay, an express truck was run daily to Rapid City, S. D., a distance of 32 miles; personnel was supplied for a message center at the "Summer White House," and various minor duties were performed, such as escorting guests through the State Park. The 4th Cavalry was also called upon to furnish the Presidential party with twelve good-looking horses—lively, good jumpers, and absolutely safe for anyone to ride.

The Medical Detachment, Major Hall in command, furnished splendid personnel and were frequently called upon to perform numerous duties throughout the Park, including the treatment of sick tourists and persons injured in automobile accidents. The nearest doctor was located 32 miles from the camp.

Supplies for the camp were transported by motor truck from Fort Meade, South Dakota, 62 miles distant. Difficulties were frequently encountered with the old motor equipment. The efficiency of the motor transport personnel supplied by the 7th Corps Area in keeping the transportation in operation in spite of all difficulties is worthy of mention. In several instances bearings, gas lines, and other parts were replaced on the road.

The guard was afforded frequent opportunities for recreation. Permits

were granted to attend dances in nearby camps and towns. Motion pictures, to which the men were invited, were shown in the President's garage. Boxing and baseball games with nearby towns were held at the camp. Invitations were also extended to the officers to attend motion pictures in the President's dining room.

The Presidential party left the Black Hills on September 9, 1927, after which the camp was salvaged by the guard personnel. The performance and behavior of the personnel of the guard was beyond reproach. There were no court martials and the men behaved in a splendid manner. Letters were received from the President of the United States and from the Adjutant General of the Army commending the guard for the service performed.

A March in the Philippines

By MAJOR T. H. REES, JR., *26th Cavalry*

The March to Baguio

ON April 19, 1927, the 1st Squadron, 26th Cavalry (PS) left its station at Camp Stotsenburg, P. I., on a practice march to Baguio, Mountain Province, and return.

Immediately preceding this march, the squadron had been engaged in rifle and machine rifle practice, so both men and horses were soft. A week had been allowed in which to harden them up, but, as often happens, the Department Inspector chose this week to make his annual inspection, so the march started without any preliminary preparation. Several officers were attached to the squadron for the march at their own request.

Fortunately the first day's march was short—only fifteen miles—and we reached Capas in good shape about 9:30 A. M., April 19th. The next day, instead of halting at Tarlac as planned, we marched on through and camped five miles to the northwest on the unimproved road leading to Camiling.

The march on the following day was the hardest of all. The distance covered was only twenty-five miles, but the weather was extremely hot, the road was poor, and there was no shade. We resorted to leading more than usual, and the sun beating down on the empty saddles, made them feel like hot stoves when we mounted up again.

The wagon train, however, had the greatest difficulty. Nearly every bridge along the road had to be repaired before the wagons could be gotten across. The floors of many of the bridges were made of split bamboo matting, and the mules' feet would break through this, so that by the time the last wagon was across, the floor was pretty badly torn up. At one crossing the bridge was too weak to use at all and much time was lost until a ford was located farther downstream. The wagons reached our camp at Mangatarem that night at 9:00 P. M., having been on the road since 5:30 A. M. The mules were nearly exhausted and we had to leave one behind the next day at Salasa. He died a few days later.

Three miles from Lingayen, our destination of the next day, we arrived at the Agno River, which at this point is 200 yards wide and no bottom at fifteen feet. There is no bridge across the river on this road, the only means of crossing being a small cable ferry operated by hand. To have ferried the entire command across would have taken several hours, so it was decided to have the men and animals swim the river and to ferry the wagons across. The saddles and packs were loaded on the ferry to prevent their getting wet, as were also the men's clothes.

We all undressed in the main street of the barrio, much to the amusement of the inhabitants, then rode into the stream bareback. A little difficulty was encountered in getting the leading horses started across, but as soon as this was accomplished, the others followed without much trouble.

Each man was instructed to leave the tie rope knotted around his horse's neck, to tie a knot in the reins, to stay mounted until the horse began to



Swimming the Agno River

swim, then to float off on the downstream side, holding on to the tie rope and guiding the horse by a light pull on one rein or the other. This system worked very well except in a few cases where the men got panicky, due to fear or inexperience, and pulled their horses over backwards in the water. These men were ordered to remove the bridles from their horses and to fasten one end of the tie rope in the D-ring on each side of the halter. With no bit in the horse's mouth, there was less danger of the man pulling his horse over backward.

The best results were obtained by having the men follow each other in column of troopers at about five yards distance. If less distance is taken some horses will overtake others and paw or strike them with their hoofs. If the distance is much greater than five yards, the horses lose sight of those ahead of them and are inclined to turn around and swim for the nearer shore.

Six bancas, or native dug-out canoes, were spaced at intervals across the stream, and held in readiness to go to the assistance of any man who got into trouble. A few men who could not swim were ferried across in bancas. These men led their horses across, the latter swimming behind the bancas, the men holding the tie ropes. There was only one practicable exit from the river, which somewhat increased the difficulty of crossing, making it neces-

sary to steer a very straight course and to make allowances for the current.

Every horse in the squadron, and nearly every man, swam the river. The only accident was a broken thumb in the case of a man who got his hand mashed between a banca and the ferry.

The swimming was done about noon, and the vertical rays of the Philippine sun caused many blistered backs and shoulders.

We camped that night in a cocoanut grove on the beach of Lingayen Gulf, and a wonderful beach it is. Those of us who did not get our fill of swimming at the Agno River enjoyed the surf bathing in the ocean, but it did not improve the condition of our sun-burned backs.

The next two days' marches were made without special incident. The night of the second day out of Lingayen we camped at Klondyke, in the foothills of the Igorot country. A hotel had been built here near the site of some hot sulphur springs. The hotel had recently burned down, but the concrete tanks were still intact and overflowing with the hot sulphur water. All the officers took this opportunity to enjoy the only hot bath of the trip. The water did not have the characteristic rotten egg odor of sulphur water and the heat and medicinal qualities seemed to take all the soreness out of our bodies.

We left Klondyke for Baguio at 1:30 A. M. in order to avoid the day time traffic on the Benguet Road, which at this season of the year is very heavy, as Baguio is the summer resort of the Islands. Most of this stretch of the road is one-track only, with control gates at frequent intervals. The construction of the Benguet road is considered a remarkable feat of engineering and the scenery is beautiful. The road follows in general the valley of the Bued River with high mountains on either side, and it rises approximately five thousand feet in twenty miles.

It was a hard march on both men and animals. We led a great deal of the way, especially for several miles up what is known as the Zig-Zag. Fortunately, the wagons were nearly empty of rations and forage, and what load there was, was divided equally among them all. Also as we gained altitude the air got much cooler, and we arrived at Baguio in good shape about 8:30 A. M., April 25th.

The Stay at Baguio

Baguio is situated high up in the mountains of the sub-province of Benguet, Mountain Province, Luzon, in the southern part of the Igorot country. The mountains are covered with pine forests and the scenery is more like that of the Rocky Mountains than of the Philippine Islands.

Camp John Hay, the army post adjacent to Baguio, is used as a rest camp for American Army personnel in the Islands, and it answers the purpose admirably.

On arriving at Baguio, the squadron moved into a camp which had been previously occupied by an R. O. T. C. organization from Manila. This camp was equipped with pyramidal tents, electric lights, shower baths, Gold Medal

cots, hay-filled mattress covers, ice boxes, kitchen ranges—in fact everything to make us comfortable. It was a real treat for the scout soldiers after a week in “pup” tents.

Several of the officers took trips out of Baguio over the trails which radiate from there. The favorite trip is via the Mountain Trail to Camp 88, thence east and north via the Ifugao Trail to Bontoc, and then return to Baguio via the Mountain Trail. The trip is best made on horseback with pack animals, but it may be made on foot, using Igorot cargadores to carry the baggage. These cargadores will carry forty pounds each at the rate of three centavos per kilometer. The round trip is about 250 miles, and it furnishes a wonderful opportunity to study the life and customs of the Ifugao and Bontoc Igorots, two very primitive, non-Christian hill tribes of this region.

Other trips worth taking are to Bokod, a barrio of the Benguet Igorots; to the Mummy Cave, the floor of which is strewn with human skeletons; to Mt. Santo Tomas, elevation 7500 feet; and to Bauang on the China Sea via the Naguilian Trail. Many of us brought back souvenirs of one or more of these trips, including spears, shields, head-axes, gee-strings and skulls. Igorot spearheads took the place of those of regulation pattern on all the troop guidons.

Some of the trails are very narrow. On a trip to Bokod the load of one of the pack horses scraped against the cliff on the up-hill side of the trail and knocked the animal over the cliff. Down he went, turning over and over and end for end until he brought up in some underbrush and scrub trees seventy feet below. We worked our way down to him with difficulty, expecting to find him dead or to have to shoot him. However his only injury was a rather serious cut on his left stifle.

The aparejo was removed, and a zig-zag path was cut in the side of the hill leading back up to the trail. The horse somehow scrambled up this zig-zag, with the assistance of four men heaving on a lash rope which had been tied to the animal's halter.

In some cases, where it was necessary to lead on account of the narrowness of the trail, even the saddle bags on the larger riding horses would scrape against the side of the cliff. From these experiences it was found advisable to use small horses for these trips and to place the loads high on the pack animals.

The Return March

The squadron left Baguio on the return march at 5:00 A. M., May 6th. We made the trip down the Benguet Road in four hours, where it had taken seven hours to go up. The change from the cool air of the mountains to the extreme heat of the Central Luzon Plain caused a good deal of suffering to both men and animals, the thermometer registering above 100 degrees in the shade. May is the hottest month of the Philippine hot season. In addition

to the heat, the lack of water increased the suffering of the animals. On the road there were very few opportunities to water, and at some of the camp sites our water supply consisted of a series of carabao wallows. Another mule died at Guimba from heat exhaustion. He was turned over to the natives who butchered him up in short order with their bolos. Mule meat was the *pièce de résistance* of a fiesta in the barrio that night.



Fording the Capas River

The march to Tarlac was made without special incident; also without water or shade. The road leads across a perfectly flat open plain, and both men and animals suffered considerably. However, on arriving at camp there was found to be plenty of water in the Tarlac River, and a good bath was indulged in by all, including the horses.

We left Tarlac for Stotsenburg at 1:30 A. M., in order to avoid the heat of the day. Nothing happened until we arrived at the Capas River, just half way home. Here we found that the bridge had been washed out as the result of a typhoon the night before, and we had visions of being held up there indefinitely, as the water was very high. However, two or three men who were good swimmers reconnoitered the stream and finally located a zig-zag ford with the water about breast-high. The squadron crossed here easily, but the wagons had some trouble due to the steep banks, the swift current, and

the depth of the water, which came half-way up the bed of the wagon. It was also rather difficult for them to follow the exact route of the ford and one or two got into deep water, much to the anxiety of the drivers thereof.

We reached Stotsenburg about 9:30 a. m. and after taking care of the horses, a shower bath and a bunk looked pretty good.

Conclusions

The purposes of the march were as follows:

1. To test the ability of cavalry to make a fairly hard march during the hot season in the Philippines.
2. For training in marching, camping, swimming men and animals, reconnaissance, and night marches.
3. To familiarize officers and men with the geography of an important section of the island of Luzon.
4. For recreation.

The march undoubtedly accomplished all of the above purposes.

The average daily march on the way to Baguio was twenty miles; on the return trip, nearly twenty-six miles. One horse and two mules died from heat exhaustion. The animals were just about pushed to their limit. If the daily marches had been much longer, or had the march continued for a greater number of days, we would probably have lost a good many more animals.

Night marches have many disadvantages, but they are preferable to day marches during the hot season here in order to avoid the terrible heat of the sun at mid-day. The squadron made only two night marches on this trip. It would have been better had we made four times that many.

Vermont Flood Relief by the 3rd Cavalry

ON November 4, the worst flood in the history of the state of Vermont occurred. Due to a rainfall of from four to eight inches in thirty-six hours on ground already saturated, all streams became greatly swollen, flooding huge areas and carrying away about five hundred bridges throughout the state. The garrison at Fort Ethan Allen, under command of Lieutenant Colonel W. S. Grant, 3d Cavalry, took an important part in the flood relief. At 6:00 A. M. all electricity went off and the roar of the Winooski River could be heard on the post. The papers reported no communication with Montpelier since 10:00 P. M. the night before. As far as communications were concerned, the area around Fort Ethan Allen, between the Browns, Lamoille and Winooski Rivers, was cut off from the outside world. Officers' call was sounded at 7:45 A. M., and every individual and organization was notified to be in readiness for any duty. During the morning seven cavalry details were sent out in private automobiles to make immediate local reconnaissance and to do rescue work. Troop A, Captain W. W. Cox commanding, was ordered to be prepared for immediate field service; Troop B, Captain Harry Foster commanding, was ordered to be ready on three hours' notice.

Details were sent to the city of Winooski torevet the river banks and bridge abutments and to try to save the bridge. This bridge was the main

artery of traffic between Burlington, Winooski and Fort Ethan Allen; it went out at 3:00 P. M. A detail of one officer and fifteen men from Troop C, Captain C. J. Booth commanding, was sent to Winooski on written request of the mayor to augment the local police force.

At noon on the 5th two mounted cavalry patrols from Troop A were sent out, one to the north and one to the south of the Winooski River, with orders to push through and get in touch with the governor at Montpelier and offer assistance. Lieutenant Norman M. Winn, with his patrol, proceeding by roads north of the river, arrived at the town of Bolton at 6:00 P. M., where, on account of distressing conditions, he remained overnight and rendered assistance. Twenty-five persons were reported drowned in that town. The next morning Lieutenant Winn moved to Waterbury, where his patrol was held for relief work, as it was reported that Montpelier needed no army aid. He later continued to Montpelier. Lieutenant Francis S. Gardner, with his patrol, proceeding by roads south of the river (a route reported as impassable), arrived opposite Waterbury twelve hours after leaving the post, having covered forty miles through bogs and over mountains in continuous mud and rain. It was impossible at this point to make further progress, mounted, so with Sergeant Duddy and Privates Rough and Williams, Troop A, he proceeded on foot. Without stopping to rest, they pushed on in the mud and rain to Montpelier. After a fifteen-mile tramp in the dark, they found a boatman, who took them across the river, and then continued on cross-country into Montpelier. After twenty-four hours over the worst of roads, cross-country, over washed-out railroad tracks and mountains, they arrived and reported to Adjutant General Johnson at Montpelier. (Captain William Mayer, 7th Field Artillery, had arrived the night before after a long round-about trip in an automobile, plus a gruelling fifteen-mile walk.)

Troop B, Captain Harry Foster commanding, was dispatched at 8:10 P. M., November 5, as part of a larger command under Major R. E. Lee, 7th Field Artillery, comprising an American Red Cross motor convoy from Burlington, and the wagon train, 7th Field Artillery, to Waterbury, where there were twenty-eight reported drowned, and much suffering. The motor convoy, the cavalry troop and the wagon train each had orders to proceed as rapidly as possible, within the limits of their respective rates of march.

The road taken by this expedition via Smugglers Notch is at best a very difficult route, and traffic tended to make it worse. There are about thirty-five to forty-five per cent grades both up and down. The peak of the ridge was covered with several inches of snow; the remainder was heavy with mud. Under these conditions, starting at night, the troop marched about seventy miles (arriving at 1:50 P. M.) in less than eighteen hours. They immediately went on guard and provost duty, and remained until November 21, when they returned to the post. Detachments were sent to Montpelier and to other points in the flood area.

All officers and organizations did strenuous duty of one kind or another in connection with reorganization and rehabilitation after the flood. The char-

acter of the service they, in conjunction with other components of the garrison, performed is reflected in the complimentary news items and editorials which have appeared in the public press.

Reserve Training in New England

THE 315th Cavalry, located in Maine, New Hampshire, Eastern Massachusetts and Rhode Island, with headquarters at Providence, R. I., one of the oldest reserve corps cavalry regiments, took its annual active duty training at Fort Ethan Allen, Vt., in August of this year. The majority of the officers of the regiment have taken active duty training each year since 1921 and the organization has been in the field as a regiment three times.

In 1924 it conducted the march of the 3rd Regular Cavalry from Camp Devens, Mass., to Fort Ethan Allen, Vt. In 1925 it organized the C. M. T. C. at Fort Ethan Allen, Vt., received and processed the students and assisted in the training of the cavalry section. In 1926 a provisional squadron of this regiment took its training at Fort Ethan Allen with the 316th Cavalry.

In 1927 forty officers of the regiment, together with a number of enlisted men of the 3rd Cavalry, were organized as a provisional war strength troop including a complete machine rifle platoon. The officers of the regiment rotated positions and all served as squad and platoon leaders and the senior officers as troop commanders in close and extended order drill, together with the practical solution of minor tactical problems. All officers benefited greatly by this training, especially the officers on duty with the machine rifle platoon, as they had the opportunity to work with a full platoon of six guns carried in the Phillips' pack saddle. Great credit is due the 3rd Cavalry, especially the enlisted personnel, for their enthusiastic cooperation and assistance.

The regiment is now beginning its inactive duty training for the winter months, this consisting of one conference per month, together with a weekly class in equitation. The Regimental Headquarters and 1st Squadron takes its training in Providence, R. I., and enjoys the use of the armory and the horses of the 2nd Squadron, 110th Cavalry, National Guard. The 2nd Squadron, located in Boston, Mass., and vicinity, has the use of the armory and horses of the 1st Squadron, 110th Cavalry, National Guard.

5th Cavalry in 1st Cavalry Division Maneuvers

THE 5th Cavalry, Colonel Wallace B. Scales commanding, as part of the 1st Cavalry Brigade, left Fort Clark September 4, en route to Marfa for the concentration of the 1st Cavalry Division maneuvers.

The route, following the Border National Highway, lay over a most uninviting stretch of country, not improved by a prolonged drought. Until the higher altitude in the vicinity of Marathon was reached, the days were extremely hot, the thermometer registering daily well over the one hundred mark. Much of the marching was done at night by starting two or three hours before daylight. With the exception of a camp on Devil's River, water was very limited, and many camps were supplied by tank cars of water shipped

on the railroad. At these camps water for washing was very limited or none was available, which added to the discomfort of marching in extreme heat in an arid country. The two hundred and eighty-five miles were covered in fourteen marches, with one day of rest. The command arrived in Marfa October 18, with the animals in excellent condition.

During the ten days' period of the maneuvers, October 20 to 29, the regi-



Cooling Out in Devil's Run

ment was given opportunities to engage in many varied types of cavalry action. The interest of the men was maintained by keeping them constantly informed of the entire situation, regardless of whether or not such information affected the immediate action of their particular unit. Such maneuvers constitute the highest type of peace training and this period was most instructive to



5th Cavalry in Camp

all concerned. Among the important lessons impressed were the necessity for constant control, and the importance of issuing timely, comprehensive, clear, and well-formulated orders. The fact that troops were of such reduced strength, forty-five to fifty men, limited somewhat the tactical experience of troop commanders, since squadrons were required to perform some missions which might have been executed by a full-strength troop.

After four days of beneficial rest at Marfa following the maneuver period,

the regiment left October 4 for the return march, which was made in twelve marches, with one day of rest, arriving at Fort Clark October 16.

For use on the marches each squadron had purchased a Ford truck, which rendered invaluable service to the troops by placing mess equipment into camp promptly, thus enabling troops to serve regular and satisfactory meals. These were also used to haul forage, wood and rations from the brigade dumps and water for the kitchens. The desirability, if not the necessity, of equipping cavalry regiments with water tank wagons of suitable construction and capacity for use in arid country was quite conclusively demonstrated during these marches and maneuvers.

During this six weeks of field service the conduct individually of the regiment was excellent; one case of absence without leave and no serious breach of discipline occurred.

This march completed something over one thousand miles of marching done by the 5th Cavalry during 1927. The animals returned in first-class condition and with but few sore backs, demonstrating that cavalry can still march long distances and maintain condition.

51st Cavalry Brigade Activities

TROOPS B, G and M, 1st Cavalry, have been re-designated Troops B, A and G, 121st Cavalry, this being the first step in the organization of the 121st Cavalry, which new regiment will give New York a complete cavalry brigade. The present plans are to organize a squadron in Westchester County, New York, where the interest in the horse has been growing of late and where there is excellent cavalry officer and enlisted man material.

The 101st Cavalry, after a rather intensive polo schedule, finished the season by winning the championship of the Second Corps Area.

The 51st Machine Gun Squadron (Squadron A) was the only representative of the brigade in the National Horse Show, but was unfortunately without its now well-known and consistent winner, *Oxford*. However, the Squadron managed to accumulate a number of ribbons and won the polo pony team class. During the show Major Nathaniel H. Egleston and the officers of the Squadron entertained the foreign officers participating in the National Horse Show at a luncheon at the Hotel Biltmore.

Several of the upstate units of the 101st and 121st Cavalry have been represented at the hunts of the Genesee Valley Hounds, which hunt through the Genesee Valley near Rochester.

Innovations in the 10th Cavalry Target Season

THE period July 1 to September 30 was designated the target season at Fort Huachuca. Preliminary instruction began, however, during May and was made continuous until August 6, as some men were backward and it also developed that, after instruction practice began, certain other men had

faults which could only be corrected by additional preliminary work in the afternoons.

On June 20 instruction practice began. In order to accomplish the labor and routine duties on the post, each troop was divided into three groups, the first composed of all men who were considered sure of being able to qualify. The first groups thus consisted of from one-third to one-half of each troop.

Qualification practice began on July 1 and was finished July 9. The time necessary for instruction and qualification firing may seem excessive, but it is explained by the method of alternating half-groups daily. By alternating thus, opportunity was given for additional instruction and the correction of individual faults as they developed; also the twenty-two targets available were insufficient to allow all men in the first groups to fire at the same time. The second and third groups were similarly handled.

In order to obtain an orderly arrangement, prevent confusion, and save time, echelons were organized from the firing line back to the cleaning racks. The first echelon consisted of the man firing and his coach (one man per target in both instruction and record firing); the second echelon consisted of the scorers at their bench-tables five yards in rear of the firing line; the third echelon consisted of the telephones five yards farther back; the fourth echelon, another five yards back, was the line of men in the next firing order, seated on mess stools in rear of their targets, with their scorebooks ready, sights set, blackened, and inspected, and with the necessary ammunition; the fifth echelon consisted of the troop ammunition supplies five yards in rear of the fourth echelon with the man in charge also responsible for sight blackening; the sixth echelon was five yards farther to the rear and consisted of the troop tables, at which sat clerks in charge of consolidating daily firing records, with the sight setting used by each man firing; twenty-five yards farther to the rear were the troop guidons, with the cleaning racks and materials where all men not having other duties were required to stay. Troop officers moved freely among their echelons exercising their duties where most needed.

O'Hare sight micrometers were used freely by all organizations that had them. Some troops had sufficient to use one with each man firing and also at the troop tables, others had only one which was used only at the table.

Arms were inspected along the line of the last echelon by the ordnance officer and his assistant. Any repairs needed that could be done immediately were made at the wagon of the ordnance officer, which was present during all the firing. Another feature was the issue from the wagon of the range supply office of all ammunition used on the range, and at the conclusion of each day's firing the turning in of all unused ammunition, with the immediate termination of accountability and responsibility for that used.

The regimental percentage was 92.87, average score 278.19. Troop G qualified 100 per cent. The Headquarters Troop had the highest average score, 291.96.

Tactical Training in the 306th Cavalry

IN view of the fullness in which practically every military subject is covered in the present Army Correspondence Courses a scheme of inactive instruction has been adopted in this regiment, commanded by Colonel John Philip Hill, which is proving extremely interesting. On account of the comparatively few members of the regiment living near enough to attend meetings the subjects covered must be applicable to all grades. For these reasons, instead of attempting to cover a specific subject or conduct a series of conferences on unrelated subjects, a continuing problem has been prepared with view of illustrating the mechanics of cavalry operations with particular attention to the factors of time and space. At each meeting several situations are discussed and solved by placing and moving suitable markers on a large scale colored war game map clearly visible to all. While the force involved is a reinforced brigade of cavalry the situations deal with units varying from a squad up. This affords each member an opportunity to command a unit suitable to his grade and, in addition to illustrating tactics and technique, presents a graphic illustration of the disposition and movements of the command as a whole. Although, in conducting a continuous problem based on the same general situation, tactical principles cannot always be illustrated as well as might be desired, this is offset by the advantage of being able to take up the discussion at one meeting just where it was left off at the last. In addition the officers of the Artillery and Engineer battalions and Services of the 62nd Cavalry Division are invited to these meetings so that they may learn the conditions under which they would be expected to operate in campaign.

1st Division Reunion at Fort Sheridan

THE 1st Squadron, 14th Cavalry, played a leading part in a military exhibition and demonstration given in honor of the 1st Division, A. E. F., at Fort Sheridan, Illinois, on October 22, 1927. Five hundred of the veterans and their families came to the post for the day.

Headed by their war time commander, Major General Charles P. Summerall, Chief of Staff, U. S. A., and Major General William Lassiter, Corps Area Commander, a special train load of veterans arrived at the post about noon. After the usual salutes and courtesies, the guests marched to the post gymnasium through double ranks of troops, at the present. Lunch was served by the ladies of the post, assisted by the Cooks' and Bakers' School. After lunch the visitors went to the post riding hall for the demonstration.

Troop A gave an exhibition of bare back riding and monkey drill. Troop B was next with a demonstration of Cossack riding. Troop C ended the afternoon's performance with a saddle drill of two platoons, ending in the exit through the fire jump. The infantry and artillery units at the post also gave demonstrations.

After the show, the guests were shown about the post and the war time veterans were given an idea of how a peace time soldier lives and "soldiers."

Inactive Machine Gun Training

DURING the winter and spring the training of the 158th Machine Gun Squadron will be conducted with two primary objectives, first to prepare for the coming tour of duty at Fort Ethan Allen, Vermont, next summer, and second to give officers of the squadron opportunity to gain practice in the instruction of others.

The course has been divided into three terms, the first of ten weeks being devoted to mounted work, the next ten weeks to conferences and map problems, and a final term of about five weeks being given over to mounted work out of doors. Meetings are held every Monday at the Commonwealth Armory where horses are made available through the courtesy of the 110th Cavalry,



8th Cavalry Approach March

Massachusetts National Guard. During the middle term, however, work will be carried on at the Army and Navy Club of Boston at 21 Beacon Street. The final term will be held from the Armory.

The 8th Cavalry in the Marfa Maneuvers

IF the ultimate test of the efficiency of a unit is its effectiveness in the field, the members of the 8th Cavalry can certainly take considerable pride in their regiment. The 2d Cavalry Brigade did some very fine marching and some of the best of it was done by the 8th. The distance marched to the maneuver area was about 190 miles. This march was immediately followed by eight days of maneuvers. Men and animals emerged in excellent condition, and arrived back at Fort Bliss better than ever.

On the first day of the maneuver the regiment as advance guard of the brigade, marched 25 miles at 6 miles per hour, established an outpost, and fought several minor engagements, mounted and dismounted, before being recalled to bivouac, without the loss of a single animal. The entire return march to Fort Bliss was made at a rate of over 5 miles per hour, without in any way wearing down either the men or horses. The march was continuous for ten days.

The month of field service seemed to bring out the best in all the men and the willingness and efficiency with which all duties were performed was remarkable. The members of the regiment were unanimous in the belief that,

when it returned to Fort Bliss, it was a much better regiment than when it left and was in fit condition to perform credibly any mission under almost any conditions.

1st Squadron, 103d Cavalry, Activities

THIS squadron successfully completed its annual encampment on August 31. Throughout the 52nd Brigade, many drills and exercises were competitive between units and the winners were awarded streamers for their guidons. Troop A won the most highly prized pennant as the best drilled unit at the encampment. Troop B (2d Troop, P. C. C.) won the Machine Rifle Squad Competition, in addition to winning the Brigade Rifle Match and placing two men on the State team to go to Camp Perry.

The squadron continues to carry on in the same spirit with its winter activities. The results of the Bower Long Range Match, won by Corporal Wood of Troop B (2d Troop, P. C. C.) with Corporals Weeks and Williams of the same organization in second and third places, showed nine of the first thirteen as cavalymen and eight of these from the enlisted personnel of the 1st Squadron.

The troop indoor polo teams are now in training for the tournament held under the auspices of the 103rd Cavalry Polo Association. In addition to this, games with other military organizations and civilian teams will be scheduled.

Activities at Fort Myer

THE Second Squadron, Third Cavalry, at Fort Myer, Va., has been engaged in a varied schedule of activities during the past quarter.

It participated in the military exhibition held at Potomac Park in Washington and entertained a detachment of the Canadian Army which was in Washington for the purpose of presenting to the United States a memorial in honor of the Americans who lost their lives with the Canadian forces in the World War. It acted as escort at the funerals of Major Generals Leonard Wood and Joseph T. Dickman, of Brigadier General Lloyd M. Brett, and the Minister of Guatemala.

Troops of the Squadron have participated in the Army Relief Exhibition at Washington Barracks, in fairs at Marlboro, Md., and at Galox, Pearisburg, Roanoke and Lynchburg, Va. They have acted as escorts to the President on the occasion of the Army Relief Memorial and the unveiling of the Meade Memorial, have given an exhibition for the student officers of the Engineer School, participated in a horse show at the Wardman Park Saddle Club, and have received a visit from the members of the Polish Army Horse Show Team



MILITARY BOOKS

The Two Battles of the Marne. By JOFFRE, VON LUDENDORFF, FOCH and CROWN PRINCE WILHELM. 229 pp. Maps. Cosmopolitan Book Corporation, New York. \$2.50.

The material included in this book has already been made public in reports, books, magazine articles and elsewhere. It is here condensed and included in one volume for better comparison of the stories by the leaders on both sides in the two decisive battles of the World War.

The names of the authors would better have been arranged in the sub-title of the book in the order in which their stories appear, which is the proper one chronologically; but the compiler evidently could not resist the thought that Ludendorff's name carries more prestige and, therefore, more selling power than Crown Prince Wilhelm's.

The picture of the controlling decisions involved in the first battle of the Marne could have been more authentically presented by either von Moltke, the German Chief of Staff, or by von Kluck, the commander of the First German Army on the marching flank, than by the German Crown Prince, who commanded the Fifth Army in a much less important position near the German center. In spite of this, the Crown Prince's story is intensely interesting. It places the blame for the loss of the battle squarely on the shoulders of von Moltke, which that commander could hardly have been expected to do. The same assertion on the part of von Kluck, who is frequently blamed for the loss of the battle, would have been open to the suspicion of personal defense.

A more just estimate of the cause of the loss of the battle might be the German system of leaving too much to the initiative of the various Army Commanders. It is a remarkable commentary on the German mind that, having the absolute power to command, they nevertheless voluntarily relinquished even controlled coordination, when its use would have been of the greatest value to them. The allies only achieved unity of command after nearly four years of conflict, while the Germans, possessing it from the first, refrained from exercising it. The inference is inescapable that the German military machine was overstaffed, especially at the top.

Ludendorff's story is a plea for the vindication of his methods and, in spite of his emphatic denial, the suspicion persists that he was more interested in personal prestige than in the success of the German arms. A brilliant strategist and tactician, he lacked the simplicity of method and concentration on the essential, which are attributes of every truly great leader.

The stories of Joffre and Foch are simple, modest and to the point. They grasped the essentials and clung tenaciously to them. By all military estimates, Germany should have won both battles of the Marne, and the fact that they did not is due to the innate qualities of

leadership of two great Frenchmen, Joffre and Foch, whom it was the good fortune of the allies to have in command at the two most critical periods of the war.

This book should be in every library of the World War.

The Santiago Campaign. By the SOCIETY OF SANTIAGO DE CUBA. 433 pp. With maps and illustrations. \$2.50.

It is appropriate that this book, the editing of which was one of the last tasks of Major General J. T. Dickman's illustrious career, should appear almost exactly at the time of his death.

The book constitutes a series of monographs on different phases of the short and decisive Santiago Campaign of the Spanish-American War. This method of presentation has the disadvantage of much repetition which would be absent in a single connected narration, but it has the very real advantage of preserving the story in the words of men who actually took part in the fighting.

There is a short description of the campaign as a whole by Brigadier General E. J. McClernand, descriptions of the parts played by many of the individual regiments and services engaged, and a number of personal recollections and diaries.

In spite of the fact that there were twenty-three regular regiments of infantry and dismounted cavalry, as against eight volunteer regiments, in the Fifth Army Corps, which conducted the operations, there are only five chapters devoted to the regulars as against nine to the volunteers. The editor clearly states that this is due entirely to the failure, after repeated efforts, to obtain contributions from regular regiments. None of the five regular cavalry regiments which participated is represented by a contribution. Surely the regular army can only do itself harm by thus hiding its light under a bushel. Furthermore, as the regular regiments were, almost without exception, used on the firing lines in the attacks at El Caney and San Juan Hill, rather than in support and reserve, their lack of contribution causes the greatest dearth of description exactly where the fighting was the thickest—on the firing line.

Other gaps in the book are brought out by General Dickman in the introduction, as follows: "There is, for instance, no separate article on the interesting and epoch-making work of the Gatling guns, nor about the scanty wheel and pack transportation. No champion has come forward to tell the story of the sufferings and service, by sea and land, of the faithful beasts, so long the dependable stand-by for the supply of our troops in the field."

General Dickman calls the Santiago Expedition "a wonderful monument to the fighting qualities of the trained American rifleman, and to the ability and resourcefulness of his leaders in overcoming the serious handicaps imposed by lack of military policy and preparation—deficient organization, especially in the staff, antiquated weapons, unsuitable uniform, paucity of artillery, and inadequate transportation and medical personnel and equipment."

For this reason alone, that is, as a study of our past military errors, the book should be in every complete military library.

Where Cavalry Stands To-day. By LIEUT.-COLONEL H. V. S. CHARRINGTON, M.C., 12th Royal Lancers. 63 pp. Hugh Rees, Ltd., London. \$1.25.

The contents of this little book appeared recently as three separate articles (corresponding to the three chapters in their present form) in the *British Cavalry Journal*.

The first article, or chapter, summarizes the history of cavalry prior to the Great, or World, War; the second records briefly the operations of cavalry in the Great War; and the third gives the conclusions of the author as to the future of cavalry.

This future the author deduces from a study of the cavalry lessons of the war, as he sees them, which he sums up in large type as follows: "The outstanding lessons of the Great War are the value of mounted troops acting in small detachments in close cooperation with other arms and their limitations when acting independently in large formations." He adds that "it is to fulfill this role and to cooperate with armoured fighting vehicles that cavalry should now be organized, trained and equipped."

The successful operations of large independent bodies of cavalry in Palestine and other

theaters of war are dismissed as having been carried out against inferior opponents. Cavalry's chief limitations against a well-armed and disciplined enemy are their limited powers of assault and susceptibility to air attack. The author evidently cannot visualize cavalry strong enough in fire power to defeat good foot troops, nor in the eventual fire attack from the ground against airplanes.

The value of the book from an American point of view lies in the emphasis placed upon the undoubted value of small cavalry detachments organically assigned to large infantry units, which we, in an eagerness to evolve efficient large independent cavalry organizations, are perhaps too prone to overlook.

Marching With Sherman, edited by M. A. DE WOLFE HOWE. 322 pp. Illustrated. Yale University Press. Price \$4.00.

This book is a collection of passages from the letters and campaign diaries of Henry Hitchcock, who was a major and assistant adjutant general of volunteers in 1864 and 1865. He acted as a sort of adjutant and private secretary to General Sherman, during the latter's march from Atlanta to the sea and northward through the Carolinas, which culminated in the surrender of General J. E. Johnston's confederate army.

Due to a decided tendency to abbreviations, as is only natural in family letters and in diaries, this book is hard to get into, but once accustomed to this, the reader is interested.

The author, with no previous military experience and having joined the army near the end of the war, could not have been expected to write a military commentary and, indeed, he has not professed to do so. It is doubtful from the text whether he was intrusted with the preparation of General Sherman's most important military papers.

The value of the book lies in the general description of the march, the nature of the country passed over, the people, the discipline and morale of the army and the character of Sherman.

The author is positively vituperative against the Southern leaders and it would seem that this part of the book might better have been omitted, as serving no useful purpose at this late day.

BIOGRAPHY

Genghis Khan. By HAROLD LAMB. 246 pp. Illustrated. R. M. McBride & Co., New York. \$3.50.

This book is the biography of one of the world's greatest, though hitherto little known, cavalry leaders.

Genghis Khan, at the immature age of thirteen years, inherited the leadership of an unimportant tribe of desert nomads, the Mongols, which inhabited a comparatively small area of Eastern Asia at the close of the twelfth century. From this inauspicious beginning, he rose to be the absolute ruler of at least one-half the then known world, his conquests and his dominions being measured in degrees of longitude rather than in miles.

He conquered in succession and brought under his submission the other desert tribes which surrounded him, all of the great civilized country of China, and the numerous Mohammedan races to the west, stopping only at the gates of modern Western Europe. Unlike Alexander and other great rulers, whose empires fell to pieces at their death, Genghis Khan passed his on to his sons and grandsons, who held it intact, and even augmented it, for several generations.

The character of this man was extraordinary. He possessed in astonishing degree the very qualities which we now seek to develop in our present-day military leaders. The only exception to this was his cruelty to conquered peoples, whom he practically exterminated. As the author says, he took from the world what he wanted for his sons and his people. He did this by war, because he knew no other means. What he did not want he destroyed, because he did not know what else to do with it.

He possessed great physical endurance, campaigning actively in the field up to the very

day of his death. His courage was undaunted; he was ever in the thick of battle. His honor was unsullied; his word was his bond. His intelligence was of a high order as shown by his willingness to take advice on administration and other matters from the educated Chinaman, Ye Liu Chutsai, whom he attached to his retinue or staff. Tact was outstanding in his handling of his family, his generals and those of his conquered subjects whom he allowed to live. His initiative and aggressiveness were great; having once decided upon war, he never failed to make the first move and to take advantage of every mistake of his opponents. He was just, as well as hard. In bearing he was every inch the soldier. His military leadership was years ahead of his time.

Even in his greatest campaigns he was greatly outnumbered by his opponents, yet he conquered them all. He never violated the principles of war, as we know them today. His forces were organized into groups of tens, hundreds, thousands and ten thousands, the last corresponding to our divisions. His men were mounted on the best horses, of which each had several in campaign; they were armed with lance, sword and arrows. Their marching and fighting ability was unexcelled. They made as much as seventy miles a day for several days and arrived fresh for battle.

His favorite maneuver was the "standard sweep," or flank attack. On one occasion, when far outnumbered, he awaited attack in a defile, between a mountain and his parked impedimenta, where he defeated the enemy by repeated attacks against the head of their column, while they were unable to take advantage of their numerical superiority in the restricted space. On other occasions, he feigned defeat, retreated and enticed his enemies into ambushes, or surrounded and defeated them. The mobility and fighting power of his men were his greatest assets. He kept them hardened for campaign by great winter hunts of several months' duration, during which they also obtained their meat.

The career and achievement of this great cavalryman should be familiar to every cavalry officer.

The book is written in an extremely interesting and entertaining style. A glance at the bibliography in the back will show the enormous amount of research undertaken by the author in order to obtain his data.

Andrew Jackson, An Epic in Homespun, by GERALD W. JOHNSON. 303 pp. Illustrated. Minton, Balch & Company. Price \$3.50.

This biography, written in the lighter vein, confounds convention by devoting the first chapter, not to parentage, dates and other unentertaining if necessary data, but to a final judgment of the man. This judgment, as is natural in the case of an author who has selected his own subject, is favorable. The remaining chapters support the judgment.

Andrew Jackson was, perhaps, our first typically American hero, as opposed to the members of what the author calls the Virginia Dynasty, represented by Washington, Jefferson, Madison and Monroe, who were more English than American in their traditions.

As a soldier, Jackson, like Grant, was, although unorthodox, eminently successful which, after all, is the soldier's real standard. His methods were blunt, to the point, decisive and often harsh. He served the country at a time when it might easily have been lost.

As a statesman, Jackson used the same methods. When opposed, he lowered his head and charged like a bull, which is hardly good politics, but which, in his case, was again successful. Yet who can say that his two greatest political victories—defeat of nullification, which was settled later once for all in the Civil War under the name of secession, and destruction of the national bank—did not represent a higher order of statesmanship than the views of his more finished opponents, Calhoun and Clay.

The two great sorrows of his life were the unjust public treatment of his wife, whom he loved, and ill health.

His qualities: roughness, integrity, courage, sentiment, common sense and patriotism, are those which have ever captivated Americans.

An American Soldier and Diplomat. By ELSIE PORTER MENDE, in collaboration with HENRY GREENLEAF PEARSON. 358 pp. Illustrated. Frederick A. Stokes Co., New York. \$5.00.

An American Soldier and Diplomat is the life of General Horace Porter by his daughter. General Porter was graduated from West Point in 1860. He was almost immediately embroiled in the Civil War in which, despite his youth, he gained great distinction, including the Congressional Medal of Honor which he won at Chickamauga. In March, 1865, he was brevetted brigadier general while serving as aide-de-camp on the staff of General Grant.

The book abounds in anecdotes of General Grant, who was not only Horace Porter's idol, but also his friend.

The Civil War closed General Porter's military career, but a life of other activities then opened for him. He was secretary to President Grant; later, he successfully entered the business world in New York. He was chiefly responsible for the erection of Grant's Tomb on Riverside Drive. He was not actively interested in politics, but his fame as an orator, as well as a man of integrity, was such that President McKinley appointed him ambassador to France in 1897.

General Porter's career as a diplomat is particularly interesting in that it shows the rise of the United States from a second-rate country to one of the Great Powers, principally as a result of the Spanish-American War. There are many anecdotes of official life, including the marriage of the Queen of Holland and visits to the Imperial Court of Russia.

Having resigned in 1905, after eight years as ambassador, General Porter turned his attention to the search for the body of John Paul Jones, which was thought to have been obscurely buried in Paris for over one hundred years. At his own expense and after great perseverance, he discovered the body, which was identified beyond the shadow of a doubt. He thus preserved for us the remains of one of our great national heroes.

As a fitting close to his useful and eventful life, General Porter was chosen with Joseph H. Choate to represent the United States at the second Hague Conference in 1907.

The book is written in an interesting manner and contains many letters and speeches, most of which are official.

Napoleon and His Family: The Story of a Corsican Clan. By WALTER GEER. Illustrated. 328 pp. Brentano's, New York. \$5.00.

"Napoleon and His Family" is the first of a series of three books by Mr. Geer dealing with the same subject. The present volume carries the history of the family from Corsica to Madrid (1769-1809). The other two are still in preparation.

It is not generally realized what a tremendous factor Napoleon's family was in his life, nor how essentially they contributed to his downfall. Fundamentally a Corsican, with the primitive feeling for the Clan ingrained in him, it was inconceivable to Napoleon that his family should not be sharers of his destiny. He placed them in the highest positions, all in accord with his schemes of Empire, and forgave their slackness, lack of cooperation, intrigues and mistakes. It seems impossible that he should have suffered them, but it never occurred to him to do otherwise.

Mr. Geer is an authority on Napoleon. The book is intensely interesting, and in spite of the many figures that play their parts in it, the author manages to make each one stand out clearly, not only as a distinct personality, but also as a contributor to the decline and fall of the Emperor.

The book is in no sense a military one, but it throws a hitherto little emphasized side light on Napoleon's character and remarkable career.

Francis Joseph, Emperor of Austria, King of Hungary, by EUGENE BAGGER. 555 pp. Illustrated. Putnam's. Price \$5.00.

Francis Joseph was the perfect refutation of the saying that, "Genius is the infinite capacity for taking pains." He left nothing to his subordinates, feeling more literally than

Louis XIV that "L'Etat, c'est Moi." He kept longer working hours than most men, but detail alone absorbed him, and the larger policies were left to incompetent or unscrupulous ministers. He lived, during his long reign of sixty-eight years, to see most of the monarchical institutions of Europe crumble around him and his own empire dwindle.

Mr. Bagger's book is not only the story of Francis Joseph as a human being and as Emperor, but also a detailed modern history of Central Europe for the hundred years preceding the World War. It shows a tremendous amount of research and an exhausting knowledge of a most confusing subject. In parts the book is intensely dramatic, especially where it concerns the pathetic and ill-fated "Emperor" Maximilian of Mexico.

Francis Joseph had one God—the *status quo*. Change was unthinkable to him and a changing world shoved him and what he stood for into the discard. The long reign of the "last of the Caesars" is a tragic story of treachery and stupidity, culminating in the murder of the Archduke Francis Ferdinand at Sarejevo and the commencement of the World War.

MISCELLANEOUS

Cow Country. By WILL JAMES. 242 pp. Illustrated by the Author. Charles Scribner's Sons, New York. \$3.50.

Will James' fourth book, following *Cowboys, North and South, The Drifting Cowboy* and *Smoky*, is a series of eight episodes, or "pieces," as he calls them, depicting life on the cattle ranges of the West, which he claims still exist with all their old-time flavor of romance, albeit in a more restricted space.

There are two stories about wild horses, not as we know them in the wild horse races in rodeos, but in their habitat. Two of the stories depict an Englishman's attempt to modernize the time-honored methods of the cow outfit. One shows the professional rodeo rider's inadaptability to the serious work of riding the range, another two old timers' yearning for the range and their joy in finding that it still exists, a third the cowboy's longing for a home, and still another his loyalty to his work, his rights and his independence.

Mr. James' language is the ungrammatical, slangy diction of the cow country, honest and outspoken. He is a hopeless sentimentalist, but with a sentiment so clean as to shame many of our present-day sophisticates. He is something of a propagandist too, as shown by his plea for the merciful extermination of the wild horse by hunting, rather than by the bloody methods of the slaughter pen, and for the preservation and appreciation of the range, the horse and the cowboy.

Mr. James' hope, that he has described in his drawings what he couldn't tell in his writings, is fulfilled. His pen and ink sketches, of which the book contains about forty, are easily the best studies of western life since those of Frederick Remington.

Everyone who liked *Smoky* will equally enjoy *Cow Country*.

They Also Serve. By PETER B. KYNE. 344 pp. Cosmopolitan Book Corporation, New York. \$2.00.

This is the first story of the World War written from the point of view of the horse.

It details the experiences of *The Professor*, a grade thoroughbred, from his birth on the range through his cow-pony days, the training camps, the sea voyage to France and the actual fighting. His friend *Tip*, the mule, is a faithful example of that astute animal, "without pride of ancestry or hope of posterity."

The Professor's story is intimately bound up with the adventures of his human friends, Captain Sam Burwell, the Red Cross Nurse Mary Varden, his owner Ern Givens, and the old Irish stable sergeant Pat Rogan. Needless to say, all of them experience to the full the adventures and romance of the war.

The horse's favorable reactions to the good care of those who treat him well and his hatred for those who do not is well brought out. The author might well have stressed more strongly the horrible wastage in horse flesh due to the general lack of training in care of animals in our war-time army.

The story is good clean romance and humor. It should be in the library of every troop and battery of the mounted service.

MILITARY MAGAZINES

The Remount. September, 1927.

Each of the five signed articles in this issue of the *Remount* is of interest to cavalrymen and other horsemen.

Major E. Engel, in a discussion called *Distortion in Horses*, makes an earnest plea for training based on absolute freedom of the horse's neck in all work. No matter what the degree of control, whether *balance*, *collection* or *rassembler*, there must still be absolutely no distortion of any part of the spinal column, which can only lead eventually to atrophy of the muscles of the spinal region. Entire freedom of the forward movement, controlled by bit action on the jaw alone, is insisted upon; a puller, or run-away, is made by *stopping*, not by *going*.

Mr. A. J. O. Culbertson gives an interesting description of the *Preparations and Test Matches for the International Polo Games*, leading up to the selection of both the American and the British teams. It is regrettable that the date of issue of the *Remount* did not permit the inclusion of a description of the international matches themselves. Mr. Culbertson praises the play of both Captain Huthsteiner and Captain Wilkinson of the Army Team.

Major Henry Leonard describes the *Colorado Springs Horse and Colt Show*, Mr. Newell Bent the *Breeding of Hunters in the Big Horn Valley, Wyoming*, especially on the stud farm of Mr. Ridgeley Nicholas, and Mr. H. H. Reese the *Kellogg Arabian Stud* in California, all of which point to a constant improvement in stock in our natural pasturage in the West.

The Cavalry Journal. (Great Britain.) October, 1927.

This issue of the British Cavalry Journal contains several articles of interest to American cavalry officers.

In *The Administration of a Cavalry Division in War*, Brevet Lieut. Colonel R. Evans, M.C., discusses the supply of the cavalry division as it will function with the new motorized transport recently adopted. He stresses the fact that, though theory is perfect, snags are often struck in practice. This will necessitate actual practice with the new equipment, before it can be counted on to function efficiently, and even then it will have its limitations. It is of interest to note that, with the new equipment, the cavalry division will have 660 motor vehicles, exclusive of motorcycles, in the first and second echelons.

It is regrettable that this issue of the British Journal contains no article on the tactical features of the new British organization, which it is understood were to be tried out in the maneuvers of last summer.

Part III of an article on *The Remount Department* brings out one important difference between their system and ours. The British army apparently does not own its stallions, but assists privately owned studs by horse show prizes, service fees and foal fees. Foals are listed and later bought, if necessary, for the service, very much as in our army.

Part III of *Precept and Precedent*, by Major J. Goddard, describes briefly the successful cavalry pursuits of Napoleon's campaigns of 1805 and 1806, and those of the Allies after Waterloo, of the Egyptian campaign of 1882, and of the Palestine campaign of 1918; as well as the unsuccessful pursuit by Napoleon before Waterloo and several instances in the World War in France where advantage of energetic pursuit was not taken.

An article called *Cavalry Still an Essential Arm* reiterates a statement which by now should be generally accepted. Three good sporting articles are *Horse Racing Through the Ages*, *Some Men and a Mountain*, being a description of the last nearly successful attempt to scale Mt. Everest, and *Buenos Aires to New York on Horseback*. British interest in our cavalry service is attested by the inclusion of a descriptive article on our Cavalry School by Major F. W. Boye.

Revue de Cavalerie (France) July-August, 1927.

Reviewed by Major W. E. Shipp

This journal continues to be of great interest to all cavalry officers.

In *The Cavalry in Morocco*, by Captain Moslard, he describes some of the actions of the four regiments (one French and three native) in 1925-1926. These regiments, each one of which consisted of four active squadrons and two squadrons of armored cars, were never employed except as squadrons or groups of squadrons. The cavalry maneuvered mounted and dismounted, but fought only dismounted. From these campaigns, the author draws many conclusions most of which—e.g. the necessity of liaison with other arms—are well known in our service. He is opposed to placing machine guns in the first echelon, to wasting cavalry on unnecessary escort and liaison duty, and to dispersing for combat on large fronts as in European warfare.

A Mission of Reconnaissance by a Cavalry Corps, The Operations of the Abonneau Cavalry Corps in Belgium, August 18-20, 1914, by Major Thierry d'Argenlieu, is a valuable contribution to the history of the war. The author shows the folly of trying to organize a cavalry corps by simply combining two divisions without adding a commander and a proper staff. He recounts the loss of an infantry battalion because it was not realized that it could not retreat as rapidly as cavalry.

Captain Montergon describes the horse show at Nice and an anonymous author the one at Rome. The success of the French team at the latter show receives its just recognition. As a result of the splendid showing of the Anglo-Arabs of the French team, the Italian cavalry has ordered twenty-five French and only ten Irish horses. The reviewer, who was present at this show, admired the French mounts—which are so well known in America, but he thought that the British were better. The latter, however, were not suitably trained for horse-show work, and only one of their riders had a good seat. For most riders, the Italian seat is by far the best to use over obstacles. The seats of the French riders would be difficult for the average horseman to copy.

In *Cavalrymen and Cyclists* Lieut. Colonel G. Besnard gives a full and interesting account of the employment of cyclists in the French Army. At the beginning of the war, they were not only used in dismounted combat—their normal mission—but for everything else as the principles regarding their employment were disregarded. During the period of trench warfare, they were used as an élite infantry; and finally, during the war of maneuver, they were used to intervene rapidly on sensitive points of the front. Cyclist units are at present part of the five light divisions and also of the corps reconnaissance groups. For the former, they serve as an élite infantry. The author believes that cyclist units are valuable only to cavalry and he does not believe that the infantry can be put on bicycles.

In *The Russian Cavalry in the First Days of the War* (I), Captain F. Gazin begins a most important contribution to cavalry history. This part deals with organization, mobilization, war plans and the screening operations during the first months of the war. The material for this series is drawn largely from the newly published memoirs of Colonel Winogradski of the 2d Division of the Guard Cavalry and the report of the Soviet General Staff on the first phases of the war. In spite of the lessons of the war with Japan, Russia expected much of her immense cavalry force—two hundred and thirty-five thousand men divided into one thousand, three hundred and fifty squadrons or *sotnias* from which thirty-three divisions of army cavalry, five independent brigades and two hundred and ninety-four squadrons of corps cavalry were formed. The value of the Russian cavalry was better gauged by the Germans, whose opinion of the Russian soldier was expressed by von Kuhl: "The Russian soldier showed himself to be, as we thought in 1913, vigorous, sober, intrepid but, on the other hand, heavy, rude, and lacking vivacity, intelligence and leadership." Combining these qualities with imperfect leadership, the failure of this great mass of cavalry to accomplish results was foredoomed.

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 Captain F. Nelson (Cavalry School)
 Captain J. B. Taylor (Infantry School)
 Captain T. E. Boudinot (Infantry School)
 Captain W. B. Augur (F. A. School)
 Captain T. J. Heavey (F. A. School)

Troop Officers' Cr.

Captain F. E. Bertholet (Cavalry School)
 Captain M. I. Voorhes (Cavalry School)

Troop Officers' Cr.—Continued

Captain J. C. Macdonald (Cavalry School)
 Captain L. F. Lawrence (Cavalry School)
 Captain G. Merrill (Cavalry School)
 Captain W. V. D. Ochs (Cavalry School)
 Captain K. Broadus (Signal School)
 Captain O. Porter (Tank School)
 Captain R. C. Blatt (Air Corps School)
 Captain W. T. Bals (University of Illinois)
 First Lieut. S. P. Walker (Cavalry School)
 First Lieut. LeR. Wightman (Cavalry School)
 First Lieut. C. H. Espy (Cavalry School)
 First Lieut. F. P. Tompkins (Cavalry School)
 First Lieut. G. W. Bailey (Cavalry School)
 First Lieut. E. F. Thomson (Cavalry School)
 First Lieut. C. H. Reed (Cavalry School)
 First Lieut. I. P. Swift (Cavalry School)
 First Lieut. W. N. Todd, Jr. (Cavalry School)
 First Lieut. H. L. Kennison, Jr. (Cavalry School)
 First Lieut. G. C. Mudgett (Cavalry School)
 First Lieut. W. R. Mears (Cavalry School)
 First Lieut. O. R. Stillinger (Cavalry School)
 First Lieut. P. B. Sancomb (Cavalry School)
 First Lieut. F. W. Koester (Cavalry School)
 First Lieut. C. A. Burcham (Cavalry School)

Troop Officers' Cr.—Continued

First Lieut. I. D. White (Cavalry School)
 First Lieut. N. F. McCurdy (Cavalry School)
 First Lieut. C. A. Thorpe (Cavalry School)
 First Lieut. J. I. Gregg (Signal School)
 First Lieut. A. W. Johnson (Signal School)
 First Lieut. C. O. Burch (Signal School)
 First Lieut. A. George (Signal School)
 Second Lieut. K. O'Shea (Cavalry School)
 Second Lieut. D. H. Galloway (Cavalry School)
 Second Lieut. W. Burnside (Cavalry School)
 Second Lieut. D. DeBardeleben (Cavalry School)

Special Advanced Equit. Cr.

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 Captain R. E. S. Williamson
 Captain P. H. Morris
 Captain H. J. Fitzgerald
 Captain M. Carson
 First Lieut. H. I. Hodes
 First Lieut. H. C. Mewshaw
 First Lieut. C. W. Feagin
 First Lieut. R. B. Bosserman

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 Major J. N. Caperton
 Captain J. T. Cole
 Captain W. F. Safford
 Captain C. R. Johnson, Jr.
 Captain R. McD. Graham
 First Lieut. W. L. Barriger
 First Lieut. J. M. Bethel
 First Lieut. J. C. Hamilton
 First Lieut. H. F. T. Hoffman
 First Lieut. W. W. Jervey

1928—Continued

First Lieut. J. K. Mitchell
 First Lieut. E. V. Stansbury
 First Lieut. C. E. Morrison
 First Lieut. J. K. Baker

1929

Major C. C. Benson
 Major G. S. Andrew
 Captain H. C. Holdridge
 First Lieut. W. J. Crowe
 First Lieut. L. L. Judge
 First Lieut. L. E. Schick

1930

Major H. N. Groninger
 Captain C. H. Gerhardt
 First Lieut. W. P. Withers
 First Lieut. C. E. Byers
 First Lieut. H. H. D. Heiberg

1931

First Lieut. C. C. Jadwin
 First Lieut. F. R. Pitts
 First Lieut. C. C. Clendenen

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 Colonel P. A. Murphy
 Colonel S. F. Dallam
 Colonel G. Vidmer
 Colonel P. E. Traub
 Colonel T. B. Taylor
 Colonel W. L. Luhn
 Colonel F. T. Arnold
 Lieut. Colonel L. S. Carson
 Lieut. Colonel C. A. Dougherty

1928—Continued

Lieut. Colonel R. M. Barton
 Lieut. Colonel W. A. Cornell
 Lieut. Colonel T. M. Coughlan
 Lieut. Colonel W. P. Moffet
 Lieut. Colonel T. Smith
 Lieut. Colonel J. G. Winter
 Lieut. Colonel G. B. Rodney
 Lieut. Colonel F. P. Amos
 Lieut. Colonel G. E. Lovell
 Lieut. Colonel H. L. King
 Major W. M. Blunt

1928—Continued

Captain C. W. Richmond
 Captain H. E. Eastwood
 Captain G. Galwey
 Captain J. D. Hood
 Captain C. H. Palmer
 Captain T. K. Petty
 Captain G. Rieman
 First Lieut. W. T. Fletcher
 First Lieut. M. E. Jones
 First Lieut. F. E. Powers

1929

Colonel A. C. Gillem
Colonel H. B. Myers
Lieut. Colonel G. H. Baird
Lieut. Colonel A. H. Davidson
Lieut. Colonel A. S. Perkins
Lieut. Colonel S. W. Winfree
Major R. E. Cummins
Major J. Kennard
Major R. C. Rodgers
Major J. M. Thompson
Major J. A. Warden
Captain R. Russell
Captain G. J. F. Heron
Captain W. G. Simmons
Captain A. H. Truxes

1929—Continued

Captain G. H. Shea
Captain R. Lawrence
First Lieut. H. A. Boone

1930

Colonel N. F. McClure
Colonel O. W. Bell
Lieut. Colonel O. A. McGee
Lieut. Colonel E. Addis
Major J. C. R. Schwenck
Major B. L. Burch
Major R. O. Annin
Major M. Garr
Major P. Gordon
Major J. E. Slack

1930—Continued

Captain B. Putnam
Captain M. Byrne
Captain B. E. Sawyer
Captain R. W. Carter
First Lieut. G. H. Wilson

1931

Colonel G. T. Langhorne
Colonel H. R. Richmond
Colonel O. B. Meyer
Lieut. Colonel D. D. Tompkins
Lieut. Colonel G. T. Bowman
Lieut. Colonel R. W. Walker
Lieut. Colonel F. G. Turner
Major T. G. Peyton
Major R. Blaine

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1928

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Lieut. Colonel B. O. Davis
Lieut. Colonel J. S. Fair
Lieut. Colonel J. T. Sayles
Lieut. Colonel C. B. Amory, Jr.
Captain A. H. Besse
Captain J. K. Colwell
Captain D. R. Dunkle
Captain O. I. Holman
Captain G. A. King
Captain C. W. Latimer
Captain P. E. Taylor
Captain C. H. Unger
Captain K. Thomas
Captain G. D. Wiltshire
Captain C. A. Eastwood
First Lieut. E. F. Cress

1929

Lieut. Colonel J. A. Barry
Lieut. Colonel P. Corbusier
Lieut. Colonel W. R. Taylor
Major C. P. Chandler
Captain G. Cronander
Captain G. H. Millholland
Captain J. W. Weeks

1930

Colonel G. S. Norvell
Colonel H. LaT. Cavanaugh
Lieut. Colonel A. F. Commiskey
Captain G. R. Mead
Captain LeR. Davis
Captain H. N. Christman
Captain W. Kenahan
Captain H. H. Neilson
Captain C. R. McLennan

1931

Lieut. Colonel A. Poillon
Lieut. Colonel G. R. Sommerville
Lieut. Colonel G. B. Comly
Lieut. Colonel F. D. Griffith
Lieut. Colonel W. W. Edwards
Major R. B. Patterson
Major H. H. Broadhurst
Captain R. E. Tallant
Captain F. H. L. Ryder
Captain A. E. Merrill
Captain O. S. Peabody
Captain C. Wharton
Captain H. S. Dodd

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1928

Lieut. Colonel W. M. Cooley
Lieut. Colonel M. C. Mumma
Lieut. Colonel T. L. Sherburne
Lieut. Colonel C. R. Mayo
Major F. W. Whitney
Captain S. Boon, Jr.
Captain C. E. Dissinger
Captain W. E. Buchly
Captain C. apC. Jones
Captain A. T. Lacey
Captain P. R. Upton
Captain R. C. Woodruff

1928—Continued

Captain D. A. Young
Captain C. J. Dockler
Captain H. H. Baird
First Lieut. D. A. Taylor
First Lieut. H. McP. Woodward

1929

Lieut. Colonel A. B. Dockery
Lieut. Colonel E. R. Harris
Major N. B. Briscoe
Captain L. H. Collins
Captain K. C. Lambert

1929—Continued

Captain R. E. Larson
Captain T. F. Limbocker
Captain C. J. Wilder
First Lieut. E. C. Johnston
First Lieut. P. A. Noel
First Lieut. V. D. Mudge
First Lieut. L. G. Smith
First Lieut. L. B. Rapp

1930

Colonel R. S. Wells
Lieut. Colonel S. D. Smith

1930—Continued

Lieut. Colonel E. A. Keyes
 Lieut. Colonel H. C. Tatum
 Major H. C. Dagley
 Captain H. W. Worcester
 Captain O. A. Palmer
 Captain R. B. Trimble

1930—Continued

Captain E. M. Sumner
 Captain N. W. Lisle
 First Lieut. A. K. Hammond
 First Lieut. M. F. Sullivan
 First Lieut. C. R. Chase

1931

Major A. T. Colley
 Major E. L. Hubbard
 Major C. L. Stevenson
 Captain S. G. Fuller
 Captain E. N. Harmon
 First Lieut. M. L. Stockton

RECRUITING**1928**

First Lieut. A. J. Hart

1929

Lieut. Colonel R. E. Fisher
 Major R. E. Carmody
 Captain L. A. Pulling
 Captain J. H. Washburn
 Captain W. R. Hamby

1929—Continued

First Lieut. F. E. Rundell
 First Lieut. W. C. Scott

1930

Captain B. G. Shoemaker
 Captain H. A. Patterson
 Captain C. W. Burkett
 First Lieut. O. M. Massey

1931

Lieut. Colonel P. J. Hennessey
 Lieut. Colonel L. G. Brown
 Lieut. Colonel H. E. Mann
 Lieut. Colonel C. O. Thomas, Jr.
 First Lieut. D. P. Buckland

AIDES-DE-CAMP**1929**

First Lieut. E. H. DeSaussure

1930

Captain C. S. Kilburn
 Captain F. A. Allen, Jr.
 Captain E. A. Regnier
 First Lieut. W. A. Holbrook
 First Lieut. L. F. Parmley
 Second Lieut. W. A. Bugher

1931

First Lieut. R. M. Eichelsdoerfer
 First Lieut. P. M. Robinett
 First Lieut. D. W. Sawtelle
 First Lieut. H. G. Culton
 First Lieut. H. M. Alexander
 First Lieut. M. McD. Jones

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 First Lieut. J. M. Glasgow

1929

Lieut. Colonel C. Burnett

1930

Major H. Thompson

1931

Lieut. Colonel E. Davis
 Major W. E. Shipp

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Captain J. W. Carroll (Chinese)

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 Lieut. Colonel R. B. Ellis
 Captain J. A. Hettinger

1929

Lieut. Colonel J. A. Benjamin
 Lieut. Colonel G. W. Biegler

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Colonel W. C. Rivers (Tempo. appointment as Maj. Gen., Inspector General)

1928

Colonel C. H. Conrad, Jr.

1929

Colonel W. R. Smedberg
Lieut. Colonel W. A. Austin

1929—Continued

Major J. P. Aleshire
Major W. H. W. Youngs

1930

Colonel C. E. Stodter
Colonel F. LeJ. Parker

1931

Colonel C. A. Romeyn
Lieut. Colonel J. Cocke
Lieut. Colonel B. Lear, Jr.
Major E. P. Pierson

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1928

Captain T. M. Roemer
Captain T. M. Cockrill
First Lieut. F. W. Drury

1929

Captain J. C. Ward
First Lieut. C. E. Snyder

1930

Major L. S. S. Berry

1931

Captain T. Brady, Jr.

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1928

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Lieut. Colonel F. M. Jones (F.A.)
Captain L. E. Ryder (Sig. C.)

1929

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1930

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Major T. Barnes, Jr. (C.W.S.)
Captain J. F. R. Scott (J. A. G. D.)
First Lieut. D. C. Kemp (Sig. C.)
First Lieut. E. E. Cox (F.D.)
Second Lieut. G. O. Barcus (A.C.)
Second Lieut. J. L. Loutzenheiser (A.C.)
Second Lieut. H. L. Boyden (A.C.)
Second Lieut. W. H. Hardy (A.C.)
Second Lieut. J. W. Bowman (A.C.)

1930—Continued

Second Lieut. J. G. Pratt (A.C.)
Second Lieut. H. E. Engler (A.C.)

1931

Lieut. Colonel W. R. Pope (Sig. C.)
Major C. V. Simpson (Sig. C.)
Major B. Y. Read (A. G. D.)
Captain S. A. Greenwell (A.G.D.)
Captain S. C. Newman (Q.M.C.)
Captain G. A. Moore (C.W.S.)
Captain N. E. Waldron (Q.M.C.)
First Lieut. F. L. Hamilton (Q.M.C.)
First Lieut. W. L. McEnery (A.C.)
Second Lieut. E. G. Johnson (A.C.)
Second Lieut. R. A. Gardner (A.C.)
Second Lieut. J. Smith (A.C.)
Second Lieut. E. P. Mechling (A.C.)
Second Lieut. J. C. Crostwaite (A.C.)

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Colonel M. C. Smith, Panama, C. Z.
Colonel J. J. Hornbrook, Camp Stanley, Tex.
Lieut. Colonel A. E. Phillips, Q. M. C.
Lieut. Colonel C. H. Muller, Berlin, Germany
Lieut. Colonel R. E. McNally, Fort Clark, Tex.
Lieut. Colonel F. W. Glover, C. M. T. C. Affairs, 5th Corps Area
Major H. E. Taylor, 2d Infantry Division, Camp Travis, Tex.
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